STATE OF MAINE
PUBLIC UTILITIES COMMISSION

Docket No. 92-345

December 14, 1993

CENTRAL MAINE POWER COMPANY
Re: Proposed Increase in Rates

ORDER

WELCH, Chairman; PAINE and NUGENT, Commissioners

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SUMMARY OF DECISION

In this Order, the Commission rejects Central Maine Power Company's proposed $83.1 million rate increase as unjust and unreasonable. In its place, we order that the Company file rates to increase its rates by <u>$26.239</u> million. This revenue requirement decision includes a cost of equity of 10.05%, which produces an overall cost of capital of 8.52%. Our cost of equity finding includes an adjustment of 50 basis points to account for the QF contract imprudency found in Docket No. 92-102.

In arriving at this decision, we find that the Company's performance in the area of management efficiency and cost cutting has been inadequate. We base our cost efficiency finding largely on the results of the Commission-ordered "focused" management audit, but rely as well on our findings concerning other aspects of Company management and its operations.

Our determination of just and reasonable rates includes an adjustment of $25.3 million for efficiency savings. This adjustment represents a reasonable balance between the interests of investors and customers.

Finally, we find that an alternative rate plan, in particular a price cap mechanism, is likely to be a better means to ensure that ratepayers do not pay for inefficiency and that management has the proper incentive to control costs. We also believe that this alternative way better accommodates the growing level of competition in the electric industry by providing greater flexibility to CMP without sacrificing the interests of CMP's "core" ratepayers. At this time, however, too many details remain unanswered. Accordingly, we will initiate a follow-up proceeding wherein CMP, the Advocate Staff and other parties will have the opportunity, by negotiation and consensus if possible and by litigation if necessary, to resolve the remaining issues.

I. PROCEDURAL HISTORY

On December 29, 1992, Central Maine Power Company ("CMP") filed a 60-day notice of intent to file a request for an increase in nonfuel rates of approximately $95 million, pursuant to Chapter 120, Section 6 of the Commission's Rules and Regulations. On February 4, 1993, the Examiners granted CMP's request (made by letter dated January 6, 1993) to allow it to delay filing of its annual report until April 1, 1993. On March 1, 1993, the Company filed its direct case, including proposed rate schedules, pursuant to Chapter 120 and 35-A M.R.S.A. § 307. On March 2, 1993, CMP filed additional confidential information and on March

4, 1993 the Company provided its confidential supplement to Item 1 of its March 1st filing in regard to § 5.C.13 of Chapter 120. On March 15, 1993, the Administrative Director found the filing to be in substantial compliance with the rule.

On April 12, 1993, CMP filed a corrected Table of Contents of its Chapter 120 Information, clarifying its intention not to address the topics of "Multiperiod Rate Plan," "Update on Hazardous Waste Sites," and "SFAS 106."

On March 24, 1993, the Commission suspended the operation of the proposed rate schedules for three months, and on June 21, 1993, the schedules were suspended for an additional five-month period from June 30, 1993, pursuant to 35-A M.R.S.A. § 310.

A Prehearing Conference was held on March 24, 1993. Procedural Order #3 was issued March 30, 1993, allowing petitions to intervene, consolidating intervenors, establishing an initial schedule, and setting out procedures for discovery, the efficient conduct of hearings, and other related matters. The order also stated that:

> Due to the large size of the requested increase, the current difficult economic climate, and extremely negative public reaction to the rates of CMP, the Commission intends to closely scrutinize all costs submitted by CMP. In particular, as the second largest area of increase, we plan to focus on the Company's demand side management expenses to determine their prudency. ... In addition, the Commission would like to consider any rate stability plans or proposals, such as revenue freezes, stayouts or increases tied to index. ...

Procedural Order #3, at pages 7 & 8.

A Case Management Conference was held on June 11, 1993. Hearings for submission and cross-examination of direct testimony were held June 15-17 and June 22-25, 1993.

Public Witness Hearings were held in six locations as follows: July 6, 1993 in Augusta, July 7, 1993 in Wells, July 8, 1993 in Belfast, July 13, 1993 in Lewiston, July 14, 1993 in Farmington, and July 15, 1993 in Portland.

A Conference of Counsel was held on August 19, 1993, to determine the scope of the issues to be considered in the context of alternative rate proposals. By Procedural Order #8, the scope of the issues to be considered from CMP's Alternative Rate Plan, filed July 21, 1993, was limited to the price cap issue.

Hearings on rebuttal and surrebuttal testimony were held on September 15-17 and September 21-23, 1993. Briefs were submitted on October 14, 1993 and Reply Briefs were submitted October 21, 1993.

Intervention

In Procedural Order #3, dated March 30, 1993, the following petitions to intervene were granted: Office of the Public Advocate ("OPA"); Department of the Navy ("Navy"); Bath Iron Works Corporation ("BIW"); AIRCO Industrial Gases ("AIRCO"); Fox Island Electric Cooperative, Kennebunk Light & Power District, Madison Electric Works ("CMP's Wholesale Customers"); Commercial Customers Utility Coalition ("CCUC"); Alliance to Benefit Consumers ("ABC"); Neighborhood Action Coalition of Greater Portland ("NAC"); Maine Association of Interdependent Neighborhoods ("MAIN"); Maine State Legislative Committee of the American Association of Retired Persons ("AARP"); Industrial Energy Consumer Group ("IECG"); Committee on Lower Electric Rates ("COLER"); Active Citizens' Electrical Rate Residential Team ("ACERRT"); Maine Citizens Committee for Electric Rate Reform ("MCCURR"); Madison Paper Industries ("Madison Paper"); Trina Wallace, Helen Patterson, Herbert C. Hammond, John A. MacDonald David S. Fox, F.G. Folsom and John McEvoy. Various intervenors volunteered consolidation for purposes of cross-examination and discovery, including IECG with COLER, and the Wholesale Customers with CCUC. The remaining intervenors were further consolidated as follows:

- Residential ratepayers including ABC, NAC/MAIN, AARP, MCCURR, ACERRT, and all individual intervenors, with OPA;

- Large and industrial customers, including BIW, AIRCO, IECG/COLER, Madison Paper, and Department of the Navy.

On May 11, 1993, the late intervention of Natural Resources Council of Maine ("NRCM") and the Conservation Law Foundation ("CLF") was allowed. The two organizations were consolidated voluntarily.

Management Audit

Procedural Order #3 also noted that the "Final Report of the Focused Management Audit of Central Maine Power Company for the

Maine Public Utilities Commission" would be submitted on July 15, 1993, and would be used in reviewing CMP's expenses. A subsequent procedural order, dated July 27, 1993, set forth a schedule for integrating the management audit into this proceeding, including the filing of CMP's reply testimony on September 1, 1993.

Pre-Filed Testimony

The Company's filing included the pre-filed direct testimony of Matthew Hunter, President and Chief Executive Officer (Vision Statement, Goals and Objectives, Controlling health care costs, Management Audit); David E. Marsh, Senior Vice President, Finance and Chief Financial Officer (Financial justification for rate increase); David M. Brooks, III, Corporate Finance Specialist (Rate of Return); Laurie G. Lachance, Corporate Economist (Sales Forecast); Robert E. Tuoriniemi/Paul A. Dumais, Manager of Financial Reporting/Director of Revenue (Test year revenue increase, adjustments proposed to test year results, test year actual net operating income and rate base); Paul A. Dumais, Director of Revenue Requirements (Attrition analysis); Peter A. Maheu, Director, Rate Development and Pricing (Rate development process).

The Commission Staff prefiled direct testimony of Denis P. Bergeron (DSM); Richard J. Lurito (Cost of Capital and Capital Structure); John Stutz (Sales forecast); James H. Breece (Maine economic forecast); and Thomas S. Catlin (Revenue Requirements).

The Office of the Public Advocate prefiled testimony of Thomas Knudsen and Michael Bleiweis (Revenue Requirements).

CCUC prefiled the testimony of John Peters, Thomas J. Mathews, and James H. Ash (Customer Impact); Roberta M. Weil (Capital Structure and Financial Integrity) and Gordon M. Weil (Cost of Capital and rate cap proposal).

IECG/COLER prefiled the testimony of Jesse Magee, III, Glenn Poole, Samuel Brogli, Steven Rowe, Charles Siletti, Robert Sween, John Raden, John Spenlinhauer, III, Rand Stowell, and David Johnson (Customer Impact); Prof. William G. Shepard (Economic Forecast); and Dr. Richard H. Silkman (Rate Freeze and Corporate Efficiency).

The Department of the Navy prefiled the testimony of Thomas J. Knobloch (Rate Design); John P. Legler (Capital Structure); and Ralph C. Smith (Revenue Requirement).

NRCM/CLF prefiled the direct testimony of Joseph M. Chaisson (DSM).

On July 14, 1993, CMP filed rebuttal testimony of David E. Marsh, Robert E. Tuoriniemi/Paul A. Dumais, Laurie G. Lachance, and David M. Brooks, III.[1] In addition, CMP filed rebuttal testimony by several new witnesses including Thomas D. Mockler, Director of Fixed Income Research; Tucker Anthony, Inc. (Credit Quality); Philip C. Hastings/Hossein Haeri, Director of DSM Planning/Director of Evaluation and Assessment (Demand Side Management); and Douglas Stevenson, Vice President, Planning and Budgets (Management Audit).

On July 15, 1993, Advocate Staff filed the Management Audit.

On July 21, 1993, CMP filed an Alternative Rate Proposal, and on August 12, 1993, CMP requested leave to file the supplemental updated and rebuttal testimony of Robert E. Tuoriniemi/Paul A. Dumais regarding the issues of recent federal income tax law changes and the recent actions of Madison Electric Works and Madison Paper Industries. CMP filed second supplemental testimony of Robert E. Tuoriniemi/Paul A. Dumais addressing the financial impact of the Madison actions. By Ruling on Staff's Objection to CMP's Request for Leave to Supplement Rebuttal Testimony, dated September 10, 1993, the Examiners allowed only the supplemental testimony regarding the federal tax changes, striking the testimony on the Madison issue. On September 10, 1993, CMP filed a Motion for Reconsideration of the Examiners' Ruling.

Staff and Intervenors prefiled the following surrebuttal testimony:

- Advocate Staff filed testimony of Denis Bergeron, Barbara Alexander, Richard Lurito, James Breece, Thomas

[1] On July 14, 1993, in addition to filing revised rate schedules to reflect the changed revenue increase from $95 million to $82 million, CMP also filed revisions to rate schedules and Terms and Conditions that were not proposed to be changed in the March 1 filing. Because these schedules and Terms and Conditions were not merely updated revisions to schedules that had already been suspended by the Commission, the newly filed July 14 schedules (and Terms and Conditions), which were filed with an effective date of August 19, 1993, were twice suspended pursuant to Section 310. Updated changes and corrections to some of the Terms and Conditions were filed with the Commission on November 3 and November 23. These corrected and updated rate schedules and Terms and Conditions were approved in Our Part I Order.

Catlin, John Stutz, Patricia Schumaker, Marvin H. Kahn, and Dale E. Swan.

- The OPA filed testimony of Thomas Knudsen and John Stutz (jointly with AARP).

- AARP filed testimony of Neil Talbot and John Stutz (jointly with OPA).

- IECG/COLER filed testimony of Jesse Magee, III, Glenn Poole, Rand Stowell, John P. Murphy, Steven Rowe, Michael R. Stumbo, and Dr. Richard H. Silkman.

- CCUC filed testimony of Gordon L. Weil.

On August 26, 1993, CMP filed, in response to other parties' surrebuttal testimony on the Management Audit, testimony of Geoffrey W. Green, Director of Consumer Affairs, and Douglas Stevenson.

On September 16, 1993, Barbara Alexander filed supplemental testimony on behalf of the Advocate Staff.

Protective Orders

Six protective orders requested by the Company were granted on February 12, 1993, as follows:

- Protective Order No. 1, regarding "DRI, PACE, RISI, Blue Chip and NEEP Information;"

- Protective Order No. 2(A) regarding "non-utility generation contracts;"

- Protective Order No. 2(B) regarding "Request for Proposal for Buyouts and Buydowns Relating to Qualifying Facilities and Other Contracts;"

- Protective Order No. 3 regarding "Specific Customer Data;"

- Protective Order No. 4 regarding "Fuel Contracts;"

- Protective Order No. 5 regarding "Confidential Business Information[2]."

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[2] On February 12, 1993, Staff filed comments on the granted Protective Orders stating its concern (particularly with

Protective Order No. 5) that the language of the orders and the scope of distribution in some cases, may require modification. Several additional requests for modifications were made including one to allow dissemination of Protective Order No. 4 to designated (non-lawyer) representatives. In response to Examiners' CMP employed a system to do so by arrangement.

An additional Protective Order was granted on April 28, 1993 regarding "Information Related to Power Partners Projects." CMP's request for "Protective Order #7 -- Competitive Market Information" was denied by Procedural Order dated September 14, 1993.

II. OVERVIEW

This Commission has decided many important cases in the last 20 years. Even so, this rate case for Central Maine Power Company may be viewed by the people of the State of Maine as the defining decision of the Public Utilities Commission.

The 1990s have seen increasing competition for CMP and other electric utilities. At the same time, CMP's rates have risen significantly in the last three years, adversely affecting its competitive position, and CMP's customers in Maine have suffered the consequences of a severe recession. The obligation of the Commission to serve the public interest is brought into especially sharp focus by this confluence of circumstances.

CMP contends that traditional revenue requirement analysis supports a significant rate increase; CMP cautions that "rate regulation is not a referendum." By contrast, the other parties almost uniformly agree that this case is "a momentous proceeding for Maine" (IECG/COLER) or a "watershed case for CMP" (Advocate Staff). These other parties assert that customers will not and in some cases cannot tolerate further rate increases, and should not be required to do so, because CMP has failed to cut costs adequately and hence is not as efficient as the utility should be.

The view held by many of CMP's customers of this case is reflected in the unprecedented level of attention given by the public to this proceeding and events leading to it. Between January 15 and May 15, 1992, 15 formal complaints signed by thousands of customers were filed with the Commission. These complaints were consolidated and investigated in Docket No. 92-078. While one factor in the complaints was the rate design change implemented in December, 1991, there was widespread agreement from the complaining customers, the public witnesses, and the parties that CMP's rates were a serious problem for all classes of customers. Re: Central Maine Power Company, Dockets 92-078 and 89-068 (Me. PUC August 5, 1992).

While we found that a base rate investigation was premature, we did order a Management Audit in Docket No. 92-078, the results of which have become an issue in this case. We also stated that:

> the Company's next base rate case will be pursued with aggressive scrutiny, seeking cost reduction in every possible area of the Company's revenue requirement. If the revenue requirement can be lowered, a real solution to the problem of all classes of ratepayers will have been achieved, with consequent benefits to the Maine economy. If not, there is at least the hope of restoring confidence in the regulatory process by conducting a proceeding that is open, balanced, and rigorous as the resources of governmental process allow. Id. at 70.

This rate case has been characterized by substantial additional ratepayer participation. We have attempted to accommodate these first-time intervenors so as to make their participation meaningful, while complying with the requirements of Title 35-A and our Rules and the Administrative Procedure Act. After the close of this docket, we will assess whether we succeeded in making our process less daunting to first-time intervenors and how we can improve in this regard.

In this case we have also benefited from the extensive public participation at all six of the July public witness hearings. We agree with the CCUC that the vast majority of persons pleaded for lower rates and asserted that CMP had not taken sufficient steps to cut costs prior to seeking an increase in rates. CMP's allegation in its brief that this public outcry was "alleged" and a "carefully staged process," should be embarrassing to CMP. If the "directors" of this production did carefully "stage" the event, then they must have cast professional actors, because, almost without exception, persons from whom we heard at these hearings were thoughtful in their remarks and were genuine and sincere in their demeanor. Indeed, CMP's efforts to deny ratepayer distress underscore a serious cause for concern about management's failure to respond to the present economic climate.

III. THE LEGAL CONTEXT

This case started when CMP requested to change its rate schedules by which the Company would increase the electricity charges to its customers. Pursuant to 35-A M.R.S.A. § 307, CMP made the rate schedules effective 30 days after the day they were filed. Using the power granted the Commission pursuant to § 310, we have suspended the effective date of the rate schedules for a period totalling eight months, in order to investigate the propriety of the proposed rate increase. In such investigations, the burden of proof is on CMP to show that the rate increase is just and reasonable. Id, See also 35-A M.R.S.A. § 1314(2) (1988).

The legislative directive to the Commission in deciding the propriety of rate changes is contained in Section 301: rates charged "shall be just and reasonable." 35-A M.R.S.A. § 301(2)(1988). Moreover, "every public utility shall furnish safe, reasonable and adequate facilities and service." 35-A M.R.S.A. § 301(1)(1988). Finally, Section 301(4) provides that:

> In determining just and reasonable rates, the Commission: A. Shall provide such revenues to the utility as may be required to perform its public service and to attract necessary capital on just and reasonable terms; and B. May consider whether the utility is operating as efficiently as possible and is utilizing sound management practices, including the treatment in rates of executive compensation.

Historically, the Commission has determined whether rates are just and reasonable by determining the revenue that is required for the utility to reasonably provide the service that the utility is obligated to provide. After the "revenue requirement" is determined, actual rates are designed to collect that amount of revenue. Revenue requirement is decided by first deciding the fair return that the utility should be provided a reasonable opportunity to earn. Then the Commission must determine whether the utility is actually earning its fair rate of return and, if not, the amount of revenue needed to give the utility a reasonable opportunity to do so. This second step involves the analysis of a utility's revenue, expenses and investments within a recent 12-month operating period called a "test year." The test-year analysis involves adjusting for changes from the historical period to the future period, as well as analyzing the prudence or reasonableness of certain expenses or investment and ultimately reveals the return actually expected to be earned. The actual return as compared to the required return and either a lower or higher revenue requirement may result.

Although such "test year" approach has been almost universally used by this Commission in setting rates, there have been many variations and adjustments to the test year approach. In affirming one particular adjustment in an NET rate case, the Law Court stated that:

> By necessity, the Commission deals with estimates and hypothetical constructs. Such estimates must be based on reasonable formulations. The Commission has broad discretion in selecting among various ratemaking methodologies, provided that they are reasonably accurate. See New England Telephone and Telegraph Company v. Public Utilities Commission, 390 A.2d 8, 49 (Me. 1978). The Commission is not required to manipulate its methodologies to eliminate every thread of suggested inaccuracy.

New England Telephone Company v. Public Utilities Commission, 470 A.2d 772, 776 (Me. 1984).

Thus, judicial interpretation of Title 35-A has never prescribed any particular ratemaking methodology, including the historic test year approach. The Commission may exercise reasonable discretion in selecting methodologies.

Rate regulation is legally justified because a utility receives a monopoly franchise. By this franchise, utilities are permitted to operate as the sole provider of utility service in a specific geographic area. In return, the utility has a duty to provide adequate service at the lowest reasonable cost over time. When the utility assets used to provide such service are owned and operated by private investors, questions sometimes arise whether the regulation of such private assets employed in the public interest result in a "taking" within the Fifth Amendment of the United States Constitution. According to the United States Supreme Court, "the Constitution protects utilities from being limited to a charge for their property serving the public which is so "unjust" as to be confiscatory." Duquesne Light Company v. Barasch, 109 S. Ct. 609, 98 PUR 4th 253, 257 (1989). In Duquesne, the Court held that Pennsylvania could impose a used and useful test whereby prudently incurred expense for a cancelled nuclear plant could be completely disallowed under Pennsylvania ratemaking law. The Constitution does not require that state commissions specifically allow a return on all prudent investment, as long as the resulting rates are not unjust and unreasonable, i.e., that the rates allow a "fair return" on investment sufficient to avoid a finding that a "taking" results. The rates set by the Pennsylvania Commission passed this test.

Accordingly, the Court reaffirmed its holding in the landmark case of Federal Power Commission v. Hope Natural Gas Company, 320 U.S. 591 (1944), wherein the Court said "[i]t is not the theory but the impact of the rate order which counts. If the total effect of the rate order cannot be said to be unjust and unreasonable, judicial inquiry . . . is at an end. The fact that the method employed to reach that result may contain infirmities is not then important." Duquesne at 98 PUR 4th at 258, quoting Hope Natural Gas, 320 U.S. at 602.

The Constitution cannot be used to test the theoretical consistency of ratemaking methods. Impact matters, theory does not:

> The economic judgment required in rate proceedings are often hopelessly complex and do not admit of a single correct result. The Constitution is not designed to arbitrate these economic niceties.

Id. at 259.

IV. DEFINING OUR REGULATORY PRINCIPLES

Although the Constitution does not arbitrate the "economic niceties" at stake in this case, the Commission must do so. And the economic issues involved in this case are complex and carry far-reaching implications for the State of Maine. Accordingly, all the non-CMP parties assert that the Commission should consider these factors such as the ability of customers to pay higher rates and the recessionary economy in Maine in deciding the proper rates for CMP. They assert that ratemaking should not be viewed by the Commission as a "cookbook" process whereby the test-year recipe is followed, but rather as a process in which the interest of customers and the utility must be balanced. Some of the parties, including IECG/COLER and the CCUC, go even further. They suggest that these factors, coupled with the evidence which shows that CMP is inefficient, warrant a decision by the Commission to reject in total CMP's request to increase its rates.

On the other hand, CMP seems to argue that the traditional historic adjusted test-year analysis must be applied by the Commission. Ratemaking should allow recovery through rates of all expenditures that are not specifically found to be imprudent. Moreover, CMP also seems to assert that a proper adjusted test-year analysis must consider evidence of attrition.

CMP's view of our ratemaking obligation is too narrow. There are many Commission ratemaking decisions in which the financial condition of ratepayers was a legitimate area of inquiry. For example, in the 1982 CMP rate case, Re: Central Maine Power Company, Docket No. 82-266 (Me. PUC 1983), the Commission stated that:

> Any action taken in response to concern with CMP's financial condition must recognize the potential impact on the Company's customers."

Id. at 26.

Many members of the public who testified asked that the Commission consider the interest of the ratepayers and not simply the interest of the utility and its investors in deciding this rate case. The Staff and the OPA argue that the interest of the ratepayers must also be taken into account when setting rates. Like the IECG/COLER and the CCUC, Staff and OPA also assert that the ratesetting process should not be "mechanical."

CMP counters that consideration of the ability to pay should occur only in rate design cases and not in cases that set revenue levels. To do so is inconsistent with the regulatory bargain, in CMP's view. The regulatory bargain presumably is that all prudently incurred costs will be "recovered."

In fact, however, weighing customer impact in the balance is entirely consistent with Law Court decisions. The Law Court has held that "the Commission must strike a nice balance between the essential revenue needs of the Company and the value of service to the ratepayer and his ability to pay." Central Maine Power Company v. Public Utilities Commission, 150 Me. 257, 278, 109 A.2d 512, 522 (1954). The balance is also recognized when determining a fair rate of return, because the return should be fair to investors but "not be so high as to constitute an unreasonable burden on the ratepayers." New England Telephone Company v. Public Utilities Commission, 390 A.2d 8, 30 (Me. 1978).

In the 1984 MPS rate case, Re: Maine Public Service Company, 67 PUR 4th 101, (Me. PUC 1985), we heard extensive testimony on the financial condition of the Aroostook County customers and their ability to withstand the large rate increase viewed as necessary to keep MPS financially viable. We found that the record supported "conclusions that (1) the proposed rate increase is of sufficient magnitude to create a general concern over ability to pay and demand elasticity, and (2) in such a situation, striking a fair balance between the interest of the consumers and investors involves setting rates at the minimum level necessary within the range of reasonableness to allow the Company to begin to regain its financial integrity." Id. at 109.

Similarly, in the often quoted Hope case, the United States Supreme Court reasoned that just and reasonable rates involve "a balancing of the investor and consumer interest." Federal Power Commission v. Hope Natural Gas Company, 320 U.S. 591, 602 (1944).

Obviously, given this history of ratemaking law, balancing the interests of investors and consumers cannot violate the "regulatory bargain." CMP's view that all prudently incurred costs must be "recovered" is overly simplistic. Indeed, prudent expenses are sometimes explicitly "shared" between ratepayers and shareholders, based upon a reasonable balancing of those two interests. Central Maine Power Company v. Public Utilities Commission, 433 A.2d 331, 344-45 (Me. 1981) (AFUDC on prudent Sears Island Nuclear cancelled plant investment not recovered from ratepayers, affirmed by the Law Court.)

Ratemaking methods and adjustments are many and varied. Some costs are non-recurring. Some costs are rejected because they are unreasonable in degree, even without a prudence analysis. See, e.g., Re: New England Telephone Company, 13 PUR 4th 65 (Me. PUC 1976) (Western Electric overcharges to the Bell System Companies) and Mechanic Falls Water Company v. Public Utilities Commission, 381 A.2d 1050 (Me. 1977) (management service fees associated with the General Waterworks Companies). It is well settled law that unreasonable charges will not be passed on to ratepayers, even without a finding of imprudence on the utility's part.

For the first time in its Exceptions to the Examiners' Report, CMP argues that Maine statute prohibits the Commission from considering customers' ability to pay as an independent factor in setting rates. According to CMP, Section 301 requires just and reasonable rates, which are to be arrived at consistent with subsection 4, considering efficiency of the operation and assuring sufficient revenues to attract capital on just and reasonable terms. In other contexts, the Legislature has expressly required the Commission to consider ability to pay, in the Electric Rate Reform Act (35-A M.R.S.A. § 3151 et seq.), wherein the Commission must consider the ability of low income residential customers to pay in designing rates. CMP argues that this statutory framework indicates a legislative intent that ability to pay cannot be taken into account pursuant to Section 301.

CMP also argues that the 1957 legislative changes to the predecessor to Section 303, wherein the Legislature prohibited the use of current or fair value of utility property in setting rates, "remove the underpinning of the 'ability to pay' language within the 1954 CMP Law Court decision." CMP argues that fair valuation meant more than mere consideration of current value of property included in rate base, but meant also to encompass notions of value of service to the customer. With fair valuation now being prohibited by statute, the argument goes, so must the affordability considerations which are implicit in a value of service approach. CMP goes on to argue that statements within Law Court decisions subsequent to 1957 concerning balancing of ratepayer and investors' interests are without legal foundation.

It seems incredible that CMP can argue that the phrase "just and reasonable rates" within Section 301 essentially mandates a 100% recovery of prudent expenses, cost of service approach to ratemaking. The words within Section 301 simply do not support the argument put forth by CMP. Moreover, many Law Court decisions since 1957 discuss ratemaking as a balancing of ratepayer and investor interest. If CMP's argument were correct, then rates would be set looking at utility cost and nothing else. Considerations of ratepayer interest would never be proper. CMP would have to rewrite Section 301 and numerous Law Court decisions in order to prevail on this point. The low income provisions in the ERRA, meant to authorize the subsidy by other ratepayers of this class of customer and the legislative answer to original cost versus fair value approach to rate base valuation, do not accomplish the result suggested by CMP.

Accordingly, we believe it is clear that our ratesetting authority should never be applied mechanically nor that the traditional test-year analysis be applied as if using a "cookbook." It is true that typically the Commission sets rates by determining a utility's revenue requirement which means analyzing the reasonable cost of providing the utility service. These decisions concerning reasonable return, investment and expenses, however, involve judgment and discretion and are made while performing the balancing function.

A. The Fair Balance Between Ratepayers and Investors

The non-CMP parties and the members of the public assert that the balancing process should favor ratepayers in deciding CMP's current rate increase request. There is little doubt that the financial condition of ratepayers in general is not good. The Maine economy has experienced a severe recession that has adversely affected residential, commercial and industrial customers. During this time, moreover, electric rates for all customers have risen significantly. Of course, the recession has also adversely affected CMP. CMP also faces increased competition from alternative fuels for uses and for wholesale and other large customers because of potential alternative suppliers. Such competition has been fed by CMP's rapidly rising rates in recent years.

We find CMP's reaction to these circumstances particularly troubling. While many of these circumstances were not in CMP's control, we nevertheless expect that CMP should act aggressively to respond in a constructive way to its environment, and especially in its efforts to reduce costs within its control.

While CMP has talked of cutting costs, we agree with the management auditors that "CMP has not aggressively turned these words into action." Indeed, CMP's primary focus on "costs" is to restructure rates so that some customers will see lower rates at the expense of other customers. This strategy of "responsibility deflection" has seemed prevalent on CMP's part. For instance, CMP's customer notices of this increase request focused on QF costs, that CMP asserted were driven by State and federal energy policy rather than CMP. Moreover, QF costs are reflected in the fuel clause adjustment, which has nothing to do with base rates. Moreover, we recently found CMP's action deficient in regards to QF costs Phase II of Docket No. 92-102. We agree with Advocate Staff that CMP has spent greater attention on a reactive strategy of deflecting blame than on proactively cutting costs. Regardless of whether Congress, the PUC or sheer bad luck has caused the predicament in which CMP now finds itself, CMP's management has the obligation to do all it can to help its customers in this crisis.

It is not clear that management is up to the task. CMP's response to the management audit, while not totally negative, has not been action-oriented. This suggests again that management has not developed the necessary "corporate culture" to emphasize cost cutting. The RFP process concerning Madison Electric Works, the testimony of CMP President Matthew Hunter on that subject, and CMP's view that it was necessary to correct the record concerning the competitiveness of CMP's bid do not engender confidence in the Company's ability to deal with these challenges, nor do they reflect the actions of a company fully "engaged" to meet its obligation.

B. Does the Fair Balance Require No Rate Increase?

We must decide as a preliminary matter whether IECG/COLER (and CCUC) are correct that the balancing of interests requires the Commission to reject any rate increase in this case. If we are convinced by the "loss of load" argument, meaning that each rate increase will result in further significant load loss, then we must ask why any increase should be allowed because such a problem could only be solved by reducing costs, not raising rates. Essentially, if customers either cannot or will not afford such a rate increase, there is nothing the Commission could do about it.

The IECG/COLER presented two expert witnesses to support their position that CMP should be denied any rate increase. Dr. Richard Silkman testified that because of the current state of the Maine economy and the recent significant rate increases granted to CMP, another rate increase would result in a loss of load causing more rate increases causing further loss of load, a scenario destined to repeat itself. Moreover, he said that the evidence showed that the Company has not eliminated much inefficiency in its operations. Dr. Silkman opined that until the Commission has dealt with the Company in a manner that would grab the attention of the Company's management, such as denying this rate increase, the Company would not undertake the course of action required to meet the challenges ahead, namely aggressive cost cutting.

Dr. Silkman also argued that CMP's proposed rate increase, rather than ensuring the financial integrity of the Company, will instead pose a serious threat to the financial health of the Company. The Company acknowledged that electricity is no longer competitively priced for a number of end uses. Based upon the so-called low-growth scenario estimated by Ms. Lachance, the loss in non-fuel-based revenue will be $35.5 million in 1994. Dr. Silkman believes that the low-growth scenario estimate is in fact too high. Dr. Silkman concludes that the evidence shows that CMP is losing electric space heating customers at a much faster pace than anticipated, that recent customer survey information shows a greater erosion of residential water heating load, and that the threat of large customers, leaving the system has intensified.

Dr. Silkman estimates a reduction in revenue of almost $45 million if CMP were granted its entire request. His scenario is more likely corroborated, in his view, by the fact that CMP's sales through the first half of 1993 are in the Company's view "extremely weak." In Dr. Silkman's opinion then, if the Company's full rate increase request were granted, only half will actually be realized by the Company. Dr. Silkman concludes that such an outcome would only lead to another rate increase request next year, based upon Mr. Marsh's rebuttal testimony. CMP would merely face yet another significant loss of load caused by price pressure. Since price increases will lead only to further load loss and weakened financial integrity, Dr. Silkman states that the answer for CMP is not a rate increase. The answer is to cut costs. Denial of the rate increase is the only method that evidently will provide the necessary incentive to CMP to cut costs.

Professor William Shepard testified that the Commission should regulate in a manner that impels the utility to achieve higher standards of cost cutting and innovative performance. Treating this rate case with a business-as-usual, test year ratemaking approach would not fill that need. He also criticized, as too risky, CMP's suggestion that its loss of load problems could be solved by a rate design which would lower prices for elastic customers but raise them for inelastic customers. Such a strategy may work in the short-term, according to Professor Shepard, but could very well lead to a "self defeating spiral of higher costs, higher rates" which would harm customers, investors and Maine's economy.

CMP urged the Commission to reject Dr. Silkman's and Dr. Shepard's recommendations. According to CMP, Dr. Silkman's conclusion concerning CMP's lack of efficiency is not based on any analysis of CMP's costs. Furthermore, he did not offer any elasticity studies to show the loss of load, "death spiral" effect that he alleges would result from a price increase. In CMP's view, there is no legal basis for rejecting the rate increase as recommended by IECG/COLER.

The position advocated by the IECG/COLER and CCUC regarding the pending rate increase request is appealing. The challenges facing electric utilities in the 1990s are new and varied compared to the past challenges. The evidence indicates that in many instances Central Maine Power Company does not seem up to meeting these new challenges. In exercising the statutory guidance in Section 301(4), we find compelling evidence that CMP is not acting as efficiently as possible and has a corporate culture whereby the means to achieve such efficiency is unnecessarily delayed. We concur with the conclusions reached by the management auditors that Company management has not aggressively turned its cost efficiency words into actions.

While we find that Central Maine Power suffers from inefficiency and that such inefficiency should be recognized in setting rates, we conclude that we should do so by estimating the impact of such inefficiency (as discussed below) rather than by a complete rejection of CMP's request. Because of the management audit and other evidence in the record, we can make a reasoned estimate of the cost of some of the inefficiency. By doing so and by also knowing that further cost cutting could be accomplished, we believe that we will have struck a proper balance of protecting ratepayers and providing investors a reasonable opportunity to earn a fair return. We believe that the IECG/COLER approach is too harsh. Our efficiency adjustment will still be sufficient to get the attention of management, while providing a more positive incentive. By conducting the typical financial analysis of the utility, including an adjustment for inefficiency, we are confident that we have fulfilled our statutory and constitutional duties to both ratepayers and CMP.[3] The argument raised by IECG/COLER and CCUC that any increase in rates will only lead to further loss of load to the further financial detriment of CMP similarly does not persuade us that the entire proposed increase must be rejected. Certainly, any rate increase at the present time creates a general concern over the ability of customers to pay it. Nevertheless, we cannot find that the demand elasticity/loss of load evidence warrants a complete denial of any rate increase. Similar to our holding in Re: Maine Public Service Company, 67 PUR 4th 101 (Me. PUC 1985), we find that demand elasticity concerns lead us instead to set rates at the minimum level within the range of reasonableness. This approach provides further justification for our efficiency adjustment, also discussed below.

V. FAIR RATE OF RETURN

It is proper to distinguish between the fair rate of return that we determine for rate-setting purposes and the cost of capital to the utility. The cost of capital to the utility is the measurement of the cost that the utility incurs in raising capital to carry on its business, and is but one factor in determining a fair rate of return. The cost of capital is the result of the analysis of costs that the utility must pay to attract both debt and equity capital, while the fair rate of return goes beyond the mathematical calculation of costs and considers the qualitative aspects of the utility's operations. Such may include, but may not be limited to, adequacy and reliability consideration of service, management and operational efficiency, and the interest of ratepayers.

This relationship between capital costs and the utility's fair rate of return has been established by several familiar United States Supreme Court decisions. Bluefield Water Works and

[3] Because we do not adopt the IECG/COLER approach, we need not decide the legality of denying CMP's rate increase as suggested by the IECG/COLER.

Improvement Company v. Public Service Commission of West Virginia, 282 U.S. 679 (1923); Federal Power Commission v. Hope Natural Gas Company, 320 U.S. 591 (1944); and Permian Basin Area Rate Case, 390 U.S. 747 (1968). The Hope and Bluefield cases collectively establish the general principles that the return to equity owners should be commensurate with the returns on other investments having corresponding risks and should be sufficient to assure confidence in the financial integrity of the enterprise in order to maintain its credit and its ability to attract capital. In Permian Basin, the Court tempered the strict reliance on the returns paid to investors with acknowledgement that commissions must consider the "broad public interest" when making decisions on rate of return. Id. at 791.

The Maine Law Court has also required the Commission to consider the interests of ratepayers when setting the rate of return. Ratepayers' interests must be given substantial weight in the final determination of a utility's allowed rate of return. New England Telephone and Telegraph Company v. Public Utilities Commission, 390 A.2d 8, 30-31 (Me. 1978). In prior cases, for example, we have made cost-of-equity adjustments to account for utility inefficiency. We have generally used such adjustments when the effect of the inefficient behavior results from inaction rather than action. See e.g., Re: Bangor Hydro-Electric Company, Docket No. 86-242, slip op. at 17-50 (Me. P.U.C., Dec. 22, 1987) (25 basis point reduction on equity because of management inefficiency in the credit and collection and conservation and demand-side management areas).[4]

As described in detail below, we take seriously our responsibility to ratepayers in the area of allowed rate of return.

A. Cost of Common Equity

The positions of the parties can be summarized as follows:

- The Company has requested a return on common equity of 12.0%. This cost rate represents the lower end of Company witness Brooks's 12.0% to 12.4% range, to which Mr. Brooks believes about 50 basis points should be

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[4] In fact, we have already decided that such an adjustment will be made in this case. In Re: Central Maine Power Company, Docket No. 92-102 (Phase II) (Me. P.U.C. October 28, 1993), we decided that because of CMP's imprudence and unreasonableness in managing the AEI #7 and MMWAC Qualifying Facility contracts, we will reduce the cost of equity used to calculate CMP's revenue requirement in this docket by 50 basis points below the level otherwise determined as the reasonable cost of equity.

added to account for issuance costs and market pressure.

- Advocate Staff's witness, Dr. Lurito, supports an equity rate of 10.8%. Advocate Staff's Initial Brief, however, supports a cost of equity rate of 10.50%, reflecting the inclusion of only 25 basis points for issuance costs.

- Navy witness Dr. Legler recommends a rate of return on common equity of 11.25%, which is the midpoint of his recommended range of 11.00% to 11.50%.

- CCUC witness Dr. Weil recommends a rate of return on common equity of 10.21%.

To arrive at these recommended rates, the parties have used various methodologies and have applied their own judgments to develop their estimates of the cost of common equity.

1. "Bare-Bones" Cost of Common Equity

a. Brooks's Analyses

The Company's cost of common equity analysis, as presented by Mr. Brooks, involves three valuation methodologies: the discounted cash flow (DCF), stock-bond risk premium, and comparable earnings of industrial companies approaches. Mr. Brooks recommends a "bare-bones" cost of common equity range of 12.0% to 12.4%, with a point estimate recommendation of 12.0%.

Mr. Brooks uses the market-based DCF model despite his statement that "I don't believe in [the] efficient market hypothesis." Mr. Brooks's DCF analysis uses a two-stage, quarterly DCF model that attempts to account for: 1) quarterly dividend payments; and 2) growth rates that may be higher in the future than they are currently. In addition to determining a DCF cost of equity for the Company, Mr. Brooks analyzed a composite of 30 electric or gas companies.

For CMP, Mr. Brooks uses a 12-month average 1992 stock price of $22.01 and the 1992 dividend of $1.56 in order to calculate a dividend yield of 7.09%. In developing his 3.0% estimate of the appropriate near-term (five year) growth rate for CMP, Mr. Brooks reviewed the I/B/E/S mean estimate, I/B/E/S median estimate, S&P consensus estimate and the Value Line five-year earnings growth estimate of 3.0%, 2.6%, 3.0% and 4.0%, respectively. Mr. Brooks believes that security analysts' estimates are "most appropriate" to use in a DCF model. Mr. Brooks further testified that the use of historical growth rates would fail to reflect the impact of the Energy Policy Act of 1992 on business risk. Regarding long-term growth, Mr. Brooks adopted the finding in a report by Eugene F. Brigham and Dana A. Aberwald that concluded that "a 5.4% earnings long-term growth rate was most probable."

For CMP, based upon the 3.0% near-term growth rate, the 5.4% long-term growth rate, the 1992 average dividend yield of 7.09%, Mr. Brooks uses his quarterly compounding model, which assumes annual increases in the common dividend, to derive an estimated required return on common equity of 12.40%.

Regarding his 30-company composite, Mr. Brooks purported to select companies with risk that have investment risk comparable to CMP. Mr. Brooks began by selecting companies with bond ratings of between A- and BBB- by Standard & Poor's and then eliminated companies that: 1) had cut or restored a dividend since 1988; or 2) did not have I/B/E/S or S&P five-year growth rates available. Once the sample was selected, Mr. Brooks reviewed these companies relative to certain S&P and Value Line rating benchmarks.

For his 30-company composite, Mr. Brooks uses a 12-month average stock price and the average 1992 dividend of the companies to calculate a dividend yield of 6.42%. In developing his 4.4% estimate of the appropriate near-term (five year) growth rate for his composite, Mr. Brooks reviewed the I/B/E/S mean estimate, I/B/E/S median estimate, S&P consensus estimate and the Value Line five-year earnings growth estimate of 4.43%, 4.39%, 4.35% and 4.80%, respectively. Regarding long-term growth, Mr. Brooks adopted a 5.4% long-term growth estimate.

For his 30-company composite, based upon the 4.4% near-term growth rate, the 5.4% long-term growth rate and the 1992 average dividend yield of 6.42%, Mr. Brooks uses his quarterly compounding model to derive an estimated required rate of return on common equity of 12.10%.

Regarding his stock-bond risk premium method, Mr. Brooks presented two approaches. First, Mr. Brooks compared utility equity returns to long-term governments. Second, he compared utility equity returns to utility bond returns.

Regarding his first stock-bond risk premium method, Mr. Brooks measured the total stock return for the Moody's 24 Electric Average over the 1932 to 1991 time period relative to the total return for long-term government bonds for the same period in developing his first stock-bond risk premium estimate of 5.38%. Mr. Brooks determined a cost of equity of 12.90% based on a premium of 5.38% and an average 1992 long-term treasury yield of 7.49%.

Regarding his second stock-bond risk premium method, Mr. Brooks measured the total stock return for the Moody's 24 Electric Average over the 1951 to 1991 time period relative to the total return for the Moody's Composite Public Utility bond yield for the same period in developing his second stock-bond risk premium estimate of 3.75%. Mr. Brooks determined a cost of equity of 12.30% based on a premium of 3.75% and an average 1992 utility bond yield of 8.57%.

For his comparable earnings analysis, Mr. Brooks presented three approaches. First, Mr. Brooks analyzed the equity returns of industrial companies and found that these companies have earned 14.6% during the last decade and 16.0% during the last five years. Mr. Brooks did not determine whether CMP's stock is of comparable risk to these companies. Second, Mr. Brooks analyzed the earned returns of companies that are rated average by Value Line with respect to Safety and Financial Strength and found that these companies have earned 15.3% on average since 1986. Finally, Mr. Brooks selected 392 industrial companies and found that these companies were projected to earn 15.1% in 1993.

b. Lurito's Analyses

The Advocate Staff's cost of common equity capital evaluation, as presented by Dr. Lurito, uses the DCF methodology for both the Company and a composite of electric companies. Dr. Lurito did not provide a range of reasonableness but instead provided a single point estimate of CMP's cost of common equity. Dr. Lurito recommended a "bare-bones" cost of equity of 10.25%.

Dr. Lurito's DCF analysis uses a constant growth rate, annual DCF model. In addition to determining a DCF cost of equity for the Company, Dr. Lurito uses a composite of six non-holding company electric companies that he believes are comparable to CMP.

For CMP, Dr. Lurito uses a 12-month average (ended March 31, 1993) stock price of $22.64 and dividend of $1.56 in order to calculate a dividend yield of 6.89%. Dr. Lurito asserts that use of the historical dividend rate will provide a "reasonable guide" as to future dividends. In developing his 3.25% estimate of the appropriate growth rate for CMP, Dr. Lurito reviewed historical growth rate estimates in dividends per share and earnings per share as well as the Company's last allowed return on equity, historical and expected retention ratios, historical and expected dividend payments, and historical market-to-book ratios. Based on his review of this information, Dr. Lurito made the judgment that investors in CMP anticipate a long-term dividend growth rate of 3.25%.

For CMP, based upon the 3.25% growth rate and the average dividend yield of 6.89%, Dr. Lurito used his annual DCF model to derive an estimated required rate of return on common equity of 10.14%.

Regarding his composite of 6 non-holding company electrics, Dr. Lurito attempted to select companies with risk that have investment risk comparable to CMP. Dr. Lurito selected electric companies with: 1) Bond ratings of between BBB+ and A by S&P's; 2) 100.0% electric revenues; 3) 1992 revenues of $500 million to $1,500 million; and 4) No dividend cut since 1986.

For his 6-company composite, Dr. Lurito uses a 12-month average stock price (ended March 31, 1993) and dividend in order to calculate a dividend yield of 6.30%. In developing his 3.75% estimate of the appropriate growth rate for his composite, Dr. Lurito made a subjective judgment regarding the growth rate that investors in the composite companies anticipate based upon his review of certain historical statistics (same as those reviewed for CMP).

For his 6-company composite, based upon the 3.75% growth rate and the 1992 average dividend yield of 6.30%, Dr. Lurito uses his annual model to derive an estimated required rate of return on common equity of 10.05%.

c. Legler's Analyses

The Navy's cost of common equity witness, Dr. Legler, used four valuation methodologies: the DCF, stock-bond risk premium, capital asset pricing model (CAPM) and comparable earnings approaches. Dr. Legler recommends a "bare-bones" cost of equity of 11.0%, which is the midpoint of his "bare-bones" range of 10.75% to 11.25%.

Dr. Legler's DCF analysis used an annual, constant growth DCF model. As a check on the reasonableness of his DCF results for CMP, Dr. Legler analyzed a composite of 13 surviving Baa/BBB rated electric companies.

For CMP, Dr. Legler used a 3-month average (January through March 1993) stock price of $23.125 as well as the March 31, 1993 stock price of $24.375 in developing DCF estimates. Dr. Legler used a forward-looking dividend rate of $1.61 in his analysis, which was based on a Value Line estimate which assumed an increase in the dividend in 1993. Dr. Legler estimates dividend yields of 7.0% and 6.6% based upon a $23.125 and a $24.375 stock price, respectively.

In developing his 3.0% estimate of the appropriate growth rate for CMP, Dr. Legler reviewed historical growth rates, the retention (b times r) growth rate and analysts' forecasts (Value Line). For CMP, based upon the 3.0% growth rate and a dividend yield of 7.0% (assuming a $23.125 stock price), Dr. Legler developed an estimated required return on common equity of 10.0%. When a $24.375 stock price is assumed for CMP, the resulting dividend yield of 6.6% when added to the 3.0% growth rate, results in a required return on common equity of 9.6%.

Regarding his 13-company composite, Dr. Legler attempted to select companies that have comparable investment qualities to CMP. Dr. Legler began by selecting 26 companies with bond ratings of Baa and BBB by Moody's and S&P, respectively, and then eliminated certain companies.

For his 13-company composite, Dr. Legler used 3-month average and spot stock prices for the same time periods that he uses in his CMP DCF analysis, a forward-looking estimate of the annualized dividend (the current dividend adjusted for one year of projected dividend growth), and historical retention and Value Line projected growth rates. For his 13-company composite, Dr. Legler developed cost of equity estimates of 9.63% and 12.05% using historical retention growth and Value Line projected growth, respectively, in conjunction with 3-month average stock prices. Dr. Legler developed cost of equity estimates of 9.37% and 11.79% using historical retention growth and Value Line projected growth, respectively, in conjunction with spot stock prices.

In his stock-bond risk premium method, Dr. Legler used a bond-yield-plus-risk-premium method. Dr. Legler estimated bond yields for each year since 1974 and then added a risk premium to that bond yield. The risk premium is the difference between the DCF cost of equity and the then current bond yield. These premiums are based on both utility bond yields and Treasury bond yields. Dr. Legler's risk premium approaches yielded cost of equity estimates that ranged from 9.07% to 11.23%.

In his CAPM method, Dr. Legler produced cost of equity estimates in the range of 10.3% to 11.8%.

Using his comparable earnings analysis, Dr. Legler produced cost of equity estimates in the range of 10.5% to 10.8%.

d. Weil's Analyses

Dr. Weil, the CCUC's cost of common equity witness, presented testimony that applies the DCF approach to CMP. Dr. Weil purports to use the FERC's DCF methodology. Dr. Weil did not provide a range of reasonableness but instead provided a single point estimate of CMP's cost of common equity. Dr. Weil supports a "bare-bones" cost of equity of 10.21%.

Dr. Weil's DCF analysis uses an annual, constant growth DCF model. For CMP, Dr. Weil begins with the same 7.09% yield developed by Mr. Brooks for CMP.

In developing his 3.02% estimate of the appropriate growth rate for CMP, Dr. Weil calculated CMP's retention (b times r plus s times v) growth rate. For CMP, based upon the 3.02% growth rate and a dividend yield of 7.09%, Dr. Weil developed an estimated required return on common equity of 10.21%.

2. Analysis of Discounted Cash Flow (DCF) Testimony

There are five basic DCF questions that will be analyzed in this section. These are:

1) Is the DCF model inherently flawed because markets are inefficient?

2) What form of the DCF model should be utilized?

3) Should a spot or an average stock price be used?

4) How can the appropriate growth rate best be calculated?

5) How can an appropriate comparable sample best be selected?

a. Is the DCF Model Inherently Flawed Because Markets are Inefficient?

The Company's witness, Mr. Brooks, does not believe in the "efficient market hypothesis" and has "concerns about the use of the DCF model in today's economic environment." On rebuttal, Mr. Brooks provided a number of summaries and abstracts pointing out concerns with respect to the efficient market hypothesis. Dr. Legler also has concerns about the DCF model. He notes that DCF methods are "producing estimates which are on the low side now." Since the efficient market hypothesis is the "cornerstone" of modern investment theory, Mr. Brooks's and Dr. Legler's statements call into question the reliability of the results of any market-based analysis, including DCF analysis.

Advocate Staff witness Dr. Lurito, on the other hand, states that "markets are efficient and that is why I relied on the DCF approach."

Despite Mr. Brooks's assertions to the contrary, there is a substantial and, we conclude, persuasive body of empirical evidence that suggests that U.S. capital markets are remarkably efficient. See, e.g., Frank K. Reilly, Investment Analysis and Portfolio Management, 2nd ed. (Chicago: The Dryden Press, 1985) at 194-195. While certain market imperfections can be identified, the market is generally highly efficient because investment analysts, portfolio managers, and other investors are continually seeking over- and under-valuations.

Company witness Mr. Brooks loses sight of the fact that the market price represents investors' expectations and return requirements. That is, the market is the price-setting mechanism that establishes CMP's market cost of common equity.

The strongest feature of the DCF model is that it is market-based. Under the DCF approach, the "market" determines the stock price, the major input into the DCF model, and therefore provides a strong indication that the model will produce a result that reflects the forward-looking requirements of investors.

Further, the DCF model provides a conceptually correct and straightforward approach for determining the cost of equity capital. When using the DCF model, a comprehensive analysis of a utility's business and financial risks is largely unnecessary because the market's assessment of risk is embodied in the market price of the utility's stock. However, the DCF model directly establishes a cost of equity capital based on the investors' required rate of return rather than on historical earned returns. The DCF model is based on the principle that the value of an asset is equal to the expected cash flows generated by that asset, discounted by the investor-required rate of return.

Because there is considerable evidence that the stock market is efficient, the DCF remains an appropriate methodology for estimating the cost of equity capital for CMP. The Commission is therefore not prepared at this juncture to abandon the DCF model because of concerns about market inefficiency. While we are well aware that a DCF analysis has to be performed carefully to avoid a significant mis-estimation of the cost of equity capital and that makes the analyst's judgment very important, we will continue to rely on the DCF.

b. What Form of the DCF Model Should be Used?

The cost of equity witnesses in this case disagreed with respect to two primary issues relating to the form of the DCF model. First, the witnesses disagreed with respect to whether an "annual" or a "quarterly" DCF model should be utilized. Second, the witnesses disagreed with respect to whether a "continuous growth" or a "two-stage" DCF model should be used.

One significant difference in results between the Company's DCF analysis and those of the Advocate Staff and the Navy stems from the procedure which Mr. Brooks uses to recognize quarterly dividend payments. While Mr. Brooks uses a quarterly form of the standard DCF model to reflect the quarterly payment of dividends, the other cost of equity witnesses use an annual form of the standard DCF model that does not explicitly recognize this effect. Dr. Weil argues that his model does purport to account for quarterly growth in dividends. Analysis, however, reveals that Dr. Weil's adjustment accounts merely for dividend growth and not for the quarterly payment of dividends.

Analysis of Mr. Brooks's model reveals that reflecting the quarterly payment increases the cost of capital estimate by roughly 0.25% (assuming a $23.125 stock price, $1.61 dividend and 3.0% growth); thus, the annual and quarterly forms of the DCF model under these assumptions produce results of 9.95% and 10.19%, respectively.

While it is true that utilities typically pay dividends quarterly, we will not adopt a quarterly form of the DCF model at this time. We recognize, for example, that the evidence in the literature that suggests that, because a utility earns a return on its investment every day, and because investors (however paid) are free to reinvest their dividends, the use of the quarterly model to set rates may produce returns in excess of the required rate. Accordingly, we will continue to use the standard annual DCF model as the principal basis for its cost-of-equity determination. We encourage CMP, Advocate Staff and other parties to present evidence on this issue in future proceedings before the Commission.

Regarding the issue of whether a "continuous growth" or a "two-stage" DCF model should be used, Company witness Brooks uses a two-stage form of the DCF model while the other cost of equity witnesses used a continuous growth DCF model. Mr. Brooks uses company-specific growth rate data for the first five years of his analysis but adopts a 5.4% growth rate for the period beyond five years.

The 5.4% long-term growth rate adopted by Mr. Brooks is based on a study of the long-term growth rates for all electrics, not just CMP. Dr. Lurito believes that this "generic" growth rate "has nothing whatsoever to do with CMP" and that the growth rate is "seriously flawed" because of the assumptions underlying its calculation. Dr. Weil stated that, "I believe that the current condition of CMP is not appropriate for the use of the two-stage growth model." Dr. Legler also found that the use of the two-stage DCF model is not appropriate. We accept the criticism of the 5.4% long-term growth rate made by Dr. Lurito and Dr. Weil. Mr. Brooks's use of the 5.4% long-term growth rate is problematic since it has little to do with CMP's specific long-term growth prospects, and we will, therefore, not adopt the two-stage DCF model in this rate case.

c. Should a Spot or an Average Stock Price be Used?

The cost of equity witnesses use stock prices reflecting varying time intervals. For CMP, Mr. Brooks uses a 12-month average 1992 stock price of $22.01. Dr. Lurito uses a 12-month average (ended March 31, 1993) stock price of $22.64. Dr. Legler uses a 3-month average (January through March 1993) stock price of $23.125 as well as the March 31, 1993 stock price of $24.375 in developing DCF estimates. Dr. Weil in effect uses the same 12-month average 1992 stock price of $22.01 as Mr. Brooks.

A stock price that reflects all the information available to the market is necessary to properly embody investor expectations. The inappropriate use of historical yields or outdated stock prices in the DCF model would bias the model's result. In principle, a current stock price may be the most accurate reflection of investor expectation because it reflects current market conditions.

In setting rates for the future, however, we must ensure that our DCF calculations are not unduly biased by short-term price phenomena. For that reason, we conclude that Navy witness Dr. Legler's use of a 3-month average (January through March 1993) stock price of $23.125 is appropriate because it provides many of the benefits of the use of a current stock price while not being overly influenced by short-term fluctuations and therefore is somewhat preferable to the one-year time periods used by Mr. Brooks and Dr. Lurito in this case.[5] We have not selected a more recent period due to the market's reaction to our decision in Docket 92-102, which will reduce CMP's cost of equity by 50 basis points in this case. To do so might effectively eliminate the cost of equity reduction.

d. How Can the Appropriate Growth Rate Best be Calculated?

Historically, we have had reservations concerning Mr. Brooks's reliance on I/B/E/S and other analysts' earnings growth rates. As shown by the data in this case, there is a considerable difference between past growth rates for electric utilities and their forecasted earnings growth rates.

[5] This conclusion is supported by a 12-month average of CMP's stock price through October 1993 of $22.78.

We have similarly criticized Dr. Lurito for relying solely on historical growth rates and rejecting forward-looking estimates in his analysis.

Because of fundamental changes in the electric utility industry, we believe it is now time to begin to give increased weight to forward-looking estimates of earnings growth, such as I/B/E/S, S&P Earnings Outlook and Value Line. We should avoid overreliance on use of backward-looking or overly subjective growth rates as a proxy for the forward-looking growth rate required by the DCF model. Increased competition, which may accelerate because of the Energy Policy Act of 1992, appears to have begun to change the fundamentals of the electric utility industry profoundly. The Clean Air Act of 1990 and the possibility of retail wheeling in the future are additional factors that may limit growth opportunities for electric utilities. These factors and others may strain future utility cash flow and earnings and thereby lower prospective earnings growth rates. In this event, overreliance on the use of historic data could lead to the systematic overestimation of the prospective growth rate.

Accordingly, we will give somewhat increased weight to I/B/E/S and other forward-looking estimates of growth rates. While historical growth rate data remain relevant, we will accord slightly less weight to this data than we have in the past given the changing nature of the electric utility industry.

e. How Can an Appropriate Comparable Sample Best be Selected?

In addition to performing a DCF analysis of CMP, each cost of capital witness, except Dr. Weil, analyzed a group of companies that they believed was comparable to CMP. Mr. Brooks uses a 30-company composite. Dr. Lurito uses a composite of 6 non-holding company electrics. Dr. Legler uses a 13-company composite.

Mr. Brooks selected his 30-company composite using only one risk measurement criteria, bond rating, a measure of bond default risk. Mr. Brooks also eliminated certain companies if data were not available and "reviewed" his sample relative to certain benchmarks. In its brief, Advocate Staff asserts that Mr. Brooks's sample of 30 companies is so large that he "in essence performed a DCF analysis for the electric/gas utility industry." For this reason, Advocate Staff argues that it is unreasonable to contend that large sample sizes are more "statistically reliable."

Based upon Dr. Lurito's own primary criteria, a bond rating of between BBB+ and A by S&P's, CMP is no longer comparable to Dr. Lurito's 6-company composite. In July 1993, CMP's bond rating was downgraded to BBB by S&P. Thus, CMP no longer meets Dr. Lurito's own bond rating criteria and therefore his 6-company composite is no longer comparable to CMP.

Dr. Legler's 13-company composite, includes companies with bond ratings of Baa and BBB by Moody's and S&P, respectively. Dr. Legler then eliminated certain companies with "unrealistically low" estimates but included CMS Energy, which he admits causes an "upward bias to the average estimates."

Each of the cost of equity witnesses who developed a "comparable sample" relied heavily on bond ratings, a measure of bond default risk, in their comparable sample selection criteria. This is unfortunate since it is measures of common equity risk that should be used as a selection criteria. Investors in electric utility equities are interested in the business (operating) and financial risks related to the electric utility business from the perspective of an equity investor. These business and financial risks may not be fully captured in a utility's bond rating. In principle, an appropriate comparable sample can be developed through rigorous financial analysis and the use of an appropriate set of risk measures. Each of the comparable samples developed in this rate case was selected based on suboptimal selection criteria.

While each expert witness's comparable sample has infirmities, and, therefore, the results of each of these comparable samples should be used cautiously, Dr. Legler's sample, excluding CMS Energy, on balance provides the most appropriate comparison to CMP. This sample is small enough to provide an appropriate comparison to CMP yet large enough not to be unduly influenced by outliers (when CMS Energy is excluded). Most importantly, CMP appears to be roughly comparable in terms of equity risk to these companies.

3. Analysis of Alternative Methodologies

This Commission has primarily relied upon the DCF method in rate cases during at least the last twelve years in order to determine the appropriate cost of common equity capital. While other cost of equity estimation methodologies have been presented, they have been used to confirm or temper the DCF result, rather than being used as stand-alone cost of equity estimation methods. The record in this case provides no basis to diverge from this precedent.

For example, the stock-bond risk premium methodologies used in this proceeding are subject to question as to their precision in measuring the prospective cost of common equity. Mr. Brooks's two stock-bond-risk-premium analyses cover two long historical time periods from 1932 to 1991 and from 1951 to 1991.

Given that the risk premium varies widely depending upon the time period chosen, this method has inherent infirmities. Since the year-to-year differential between debt and equity costs is volatile and unpredictable, Mr. Brooks's historical data (for no matter how long a period) is a poor forecaster of the future relationship between debt and equity.

With respect to Mr. Brooks's "comparable earnings of non-utility companies" approach, Mr. Brooks failed to establish convincingly that CMP's stock is of comparable risk to those companies. Because of that failure, we find that this portion of Mr. Brooks's testimony cannot be relied upon by the Commission.

Because Dr. Legler uses his stock-bond-risk-premium model merely as a check on his DCF results and expresses skepticism about this methodology, we will not discuss it other than to note that we believe his skepticism is well-placed. Furthermore, Dr. Legler acknowledged that his CAPM procedure is subject to question. We agree.

Regarding his "comparable earnings of other utilities" analysis, Dr. Legler acknowledges that this approach has "limited value" and that there is "circularity" in this approach. We agree.

4. Decision on "Bare-Bones" Cost of Equity

We believe that the evidence indicates that the cost of common equity is in the range of 10.0% to 10.75%. Balancing the interests of ratepayers and investors, as we must, we find that CMP's cost of equity should be set at 10.25%. Although this estimate is not the precise mid-point of the range, it is the recommendation of Dr. Lurito, whose testimony we find, on balance, to be most reliable.

It is our judgment that the lowest end of the reasonable range is approximately 10.0%. This estimate is the same as that developed in Dr. Legler's CMP-specific DCF analysis (using a CMP stock price of $23.125), which was one component of Dr. Legler's cost of capital analysis.

With respect to Dr. Legler's 11.0% cost-of-equity recommendation, we are concerned that while he uses some forward-looking growth rate estimates, such as Value Line, he fails to use any "consensus" growth rate estimates, and the judgment upon which his 11.0% recommendation was based may have been upwardly biased by some of the results produced as part of his stock-bond risk premium and CAPM analysis. Because of these concerns, we believe that Dr. Legler's estimate must be considered to be at the high end of a reasonable range. We believe, however, that 10.75%, which is the low end of his reasonable recommended range, provides a good estimate of the high end of the reasonable range.

The general reasonableness of Dr. Lurito's "bare-bones" recommendation of a cost-of-common equity recommendation of 10.25% is supported by Dr. Weil's recommendation of 10.21%, only four basis points lower. We will adopt Dr. Lurito's 10.25% recommendation as our best estimate of the "bare-bones" cost of common equity.

We believe that Mr. Brooks's recommendation of 12.0% is higher than the reasonable range. While Mr. Brooks may have used an acceptable quarterly DCF model, an acceptable 12-month average stock price and acceptable methods in estimating the near-term (five year) growth rate, we believe that his use of a 5.4% long-term growth rate creates an unrealistic upward bias to his DCF results.

Mr. Brooks's recommendation of 12% lacks credibility for another reason. At the time of this Commission's cost of equity finding of 12.3% in Docket No. 90-076 (March 8, 1991), interest rates were between two and three percent points above their current levels.[6] While we recognize that the spread between the cost of equity and the cost of debt instruments is not constant, we cannot pretend that the cost of equity has not fallen <u>at all</u> since 1991.

Finally, the CCUC recommends a 25-basis-point downward adjustment to CMP's cost of equity because of CMP's lack of efficiency and sound management. While we acknowledge that the record reflects a lack of efficiency by CMP, we choose to adjust for inefficiency in a different manner, as we discuss in the management audit section below.

5. Flotation Cost Adjustments

All of the witnesses except Dr. Weil incorporate an allowance for issuance costs in their recommendations.

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[6] From March, 1991 to October, 1993, 91-day Treasury Bill rates fell from 6.24% to 3.2% and the prime rate from 9% to 6%.

The Company's witness, Mr. Brooks, has recommended that his "bare-bones" cost of equity be increased by 57 basis points (or about 50) in order to reflect issuance costs and market pressure. Mr. Brooks recommended a 57 basis point adjustment, which comprises of 34 basis points for issuance costs and 23 basis points for market pressure. He bases this adjustment on CMP's experience with respect to underwriters fees and direct issue costs of approximately 4.5% and two studies of market pressure effects showing between a 3.0% and 12.0% market decline. Using these figures, Mr. Brooks recommends a 7.5% allowance which he translates into his 57-basis-point adjustment, or approximately 50 basis points. This 50- or 57-basis-point adjustment is an addition to his 12.0% recommendation.

Dr. Lurito recommended that 55 basis points be allowed to reflect issuance costs and market pressure. Advocate Staff, in their Brief, support the provision of 25 basis points for issuance costs based on Dr. Legler's testimony. The Advocate Staff's witness, Dr. Lurito, recommends that a 7.5% overall allowance be made for issuance costs and market pressure. Like Mr. Brooks, he does not make any specific allowance for any so-called market break effect. In order to arrive at his 7.5% allowance, Dr. Lurito looked at the average cost of historical financing for typical electrics (4.0%) but then adopted Mr. Brooks's 4.5% figure since he agreed that this figure reflects CMP's actual historical cost experience. To the 4.5% average he adds an additional 3.0% for market pressure which he believes "needs to be made to appropriately compensate equity investors." When the market pressure component is removed from Dr. Lurito's adjustment, the portion attributable solely to issuance costs is about 33 basis points.

The Navy's witness, Dr. Legler calculates a 25-basis-point adjustment, or 3.90%, for issuance costs for the 1975 through 1990 time period, when retained earnings are excluded. When retained earnings are included, Dr. Legler's methodology produces a 30-basis-point adjustment for issuance costs for the 1975 through 1990 time period.

The witnesses have presented conflicting theories and conflicting empirical data concerning the need to increase the "bare-bones" cost of equity for flotation costs and market pressure.

As in past cases, the Company is seeking flotation cost recovery as part of its common equity cost rate. Flotation costs are typically related to one or more of the following elements: out-of-pocket issuance expenses; underwriter commissions or discounts; market pressure allowances; and contingencies for market break. Out-of-pocket expenses include printing fees, postage, legal expenses, accounting fees or other direct expenses associated with a common equity stock offering. The underwriter fees can take the form of actual payments, but they are often allowed for by the provision of a commission or discount to the underwriter on the shares to be sold.

Underwriters deduct their fees from the selling price of a stock issue (the market price). The issuing corporation therefore realizes proceeds that are less than the selling price. The proceeds are invested in property which, in the case of a utility, become part of its rate base, upon which a return is allowed. However, new investors expect a return on the amount they invested, i.e., the purchase price, which is higher than proceeds to the utility (or additional rate base) by the amount of the underwriters' fees.

We have allowed an adjustment for issuance costs in past cases and will make an issuance cost adjustment in this case for underwriters' fees or commissions and other direct out-of-pocket issuance costs.

To enable investors to earn their required return it is necessary to make some adjustment to account for the difference between the price to investors and the proceeds to the Company. One possible way would be simply to allow issuance costs as an expense. Another is to allow a rate base increase equivalent to the underwriters' fees and direct costs. In past cases, we have increased the return to equity so that the yield to investors, in effect, will be based on the purchase price. All of these methods cost ratepayers the same in present value. In this case we will continue to allow issuance costs as an addition to the return on equity, but we encourage the parties to present information on the two alternatives to this methodology in the next rate case.

For the foregoing reasons, we make an adjustment for issuance costs. We accept the estimate of 3.90%, which was supported by Dr. Legler, since the use of a longer historical time period would not reflect as closely CMP's likely future common equity issuance costs and the increased competitiveness of the investment banking industry. We will, however, adjust Dr. Legler's results to eliminate his erroneous exclusion of retained earnings from his calculation; this produces an issuance cost estimate of 30 basis points. We will therefore increase our "bare-bones" cost of equity estimate of 10.25% by 30 basis points to 10.55%.

Turning to market pressure, which is defined as a loss of market value on all equity associated with a new stock issue, we first note that in the past the Commission has viewed market break as speculative and has not provided an allowance for "normal market price fluctuations." New England Telephone and Telegraph Company, Re: Proposed Increase in Rates, Docket No. 80-142, Decision and Order at 19 (Me. PUC March 30, 1981).

Based on the record developed in this rate case, we continue to believe that the support for such an adjustment is speculative. This Commission, like most others, usually rejects expense recovery where the cost is not known or definite. There is no theoretical basis for market pressure for an electric utility stock issuance and statistical analyses of actual evidence are inconclusive. The Commission therefore is not persuaded to adjust the cost of common equity for market pressure.

B. Capital Structure

1. Summary of the Record

To estimate accurately the utility's appropriate fair rate of return, we must determine the utility's cost of capital and, perforce, the appropriate capital structure to be used.

The capital structure must both provide the lowest overall cost to ratepayers and afford financial integrity and flexibility to the Company. Advocate Staff has emphasized the importance of the former. CMP's witnesses have emphasized the importance of the latter. While Company management should be given some deference in its choice of a capital structure, we must determine if both concerns are being met.

The Company, through Mr. Brooks, presented a capital structure based on the average capitalization forecasted for the first rate effective period, 1994. Mr. Brooks used the average of beginning and ending balances to calculate his recommended amounts. He based his calculations on the Company's projected earnings, dividends and capital requirements, as well as anticipated financing activities. From the projected average balance of short-term debt (STD), Mr. Brooks subtracted the average balance projected for ERAM and the fuel clause (FCA). In doing this, Mr. Brooks was attempting to remove the effects of the FCA and ERAM from the cost of capital calculation, as required by Chapter 34 of the Commission Rules and by the Order implementing the ERAM mechanism (Docket No. 90-085). By subtracting the FCA and ERAM balances, Mr. Brooks arrived at a negative amount of short-term debt in the Company's capital structure.

For the Advocate Staff, Dr. Lurito recommended a capital structure that is more highly leveraged than that presented by CMP. Dr. Lurito also provided an estimate of CMP's operational and financial activities through the end of 1994 in order to determine CMP's sources and uses of funds and its resulting capital structure. Dr. Lurito, however, used year-end 1994 balances in calculating his recommended capital structure. He argued that year-end 1994 represented the mid-point of the rate-effective period, apparently assuming that the Company would not file and the Commission would not process another full rate case for effect before the end of 1995.

The major difference between Dr. Lurito and Mr. Brooks lies in the amount of short-term debt used to support the rate base. Since the difference in short-term debt must be made up elsewhere in the capital structure, an adjustment to common equity, preferred stock or long-term debt to account for the difference in short-term debt is also required. Dr. Lurito recommends that 5.0% of the rate case capital structure should be made up of short-term debt. This would be in addition to any amount needed to support the deferred ERAM and FCA balances. Thus, although not stated in so many words, Dr. Lurito also has attempted to comply with the mandate of Chapter 34 and the ERAM order.

Dr. Lurito essentially agreed with CMP as to the level of long-term debt which would be used by the Company through the end of 1994. However, because Dr. Lurito used the year-end balances, his amounts differ from those of the Company. Interestingly, both Dr. Lurito and Mr. Brooks arrive at the same level of mortgage bonds, due to their differing projections as to when Series T will be issued. Mr. Brooks assumed that Series T would be issued in November, 1993, while Dr. Lurito assumed a 1994 issuance date. Thus, Mr. Brooks's use of a 1994 average has this issue in the total for the entire year, while Dr. Lurito's year-end figures also has the same amount in the capital structure.

Navy witness Dr. Legler and CCUC witness Dr. Weil both basically accept the Company's capital structure, at least the one proposed in CMP's Direct case. Their briefs discuss neither the changes that Mr. Brooks made in his rebuttal testimony nor the revisions which Mr. Brooks put forth at the Rebuttal/Surrebuttal hearings. Since neither Dr. Legler nor Dr. Weil chose to participate in the various rounds of updates, we will not discuss their recommendations further.

As stated previously, the major area of dispute involves the amount of short-term debt which should be considered as used to finance the Company's rate base. Advocate Staff and CMP both acknowledge that the average deferred FCA and ERAM combined balance will be over $90 million during the rate year (the exact average depends on the technique used to accomplish the averaging). CMP projects that it will have an average short-term debt balance of about $38 million during 1994. Thus, after subtracting the combined ERAM/FCA balance, Mr. Brooks projects a negative short-term debt balance of approximately $60 million related to the financing of the Company's rate base. In other words, Mr. Brooks has assumed that CMP will use its overall capital structure (rather than short-term debt) to finance a portion of its FCA and ERAM balances. This contradicts the assumption present in Chapter 34 that short-term borrowings are used to finance deferred fuel balances; the same assumption exists with regard to unrecovered ERAM amounts. That assumption is the basis for using the short term-debt rate to calculate interest on any balances. The Company currently has short-term debt facilities of $123 million, a FERC-imposed limit of $175 million, and a legal limit from its Indentures of $209 million.

Dr. Lurito recommends that the Company employ 5.0% short-term debt to finance its rate base, in addition to any amounts needed to support its deferred ERAM/FCA balances. While the total borrowings would exceed CMP's current short-term debt capacity, Dr. Lurito avers that the Company could find new sources of short term debt. As to the FERC limit, Dr. Lurito believes that his recommendation would not unduly threaten the FERC short-term debt limitation. Dr. Lurito's position is that short term debt is a low-cost source of funds that should be included in any reasonable capital structure. He asserts that he has tested the recommended capital structure for safety and found it to be safe under nearly all conditions. While the overall level of short-term debt might exceed 11.0% of the Company's total capitalization, Dr. Lurito sees it as only a relatively short-term problem, because the FCA and ERAM balances are expected to be reduced over the next few years as the amounts are recovered from ratepayers.

2. Discussion and Analysis

We will first discuss the proper time frame to be used in determining an appropriate capital structure. In past cases when an attrition analysis has been performed, we have used an average rate year capital structure. We continue to believe that an average rate year concept properly defines the appropriate capital structure and associated costs for ratemaking purposes. This averaging technique also is consistent with the first rate-effective period that Mr. Catlin and Mr. Dumais use in their attrition analyses. Use of Dr. Lurito's end-of-rate-year capital structure would be inconsistent with that approach.

Unfortunately, our decision to use an average rate year capital structure leads to some computational problems, because the total amount of capital used by Mr. Brooks and Dr. Lurito is different. In fact, we can find no record evidence as to the precise total dollar amount of capital used by Dr. Lurito, and we are unable to arrive at a total capital figure by dividing Dr. Lurito's recommended amounts for the individual capital structure components that we can discern (i.e., long-and short-term debt and Preferred Stock) by their respective percentages, as are shown on FINAL REVISED Page 11 of Staff Exhibit 68 (late filed). Each calculation seems to result in a different total. We can use the Company's balances for long-term debt and for preferred stock, but we are reluctant to use the amount of equity shown on Revised Exhibit Brooks-17, as it is based on CMP's earning an 11.2% return on equity in 1994, a return that is well above the allowed cost of equity that we have set elsewhere in this order. Based on our knowledge of the remainder of this report, that is an unrealistic assumption.

The Commission may impose a capital structure for ratemaking purposes that is different from its actual capital structure. The capital structure that the Commission imposes for ratemaking purposes must balance the need to provide adequate financial integrity with the need to assure that the rate of return is not inflated by the use of an inappropriately high common equity ratio.

In summary, the absolute dollar amounts of long-term debt in the proposed capital structures differ only with respect to medium term notes "MTN"s and capitalized leases, and these differences are caused only by the time frame used in the analysis (i.e., year-end versus average). The last component of the capital structure to be discussed is preferred stock. The amount is not disputed by Advocate Staff or the Company. Therefore, we include $145,571,300 (or 11.78%) of preferred in CMP's capital structure.

As for the amount of short-term debt that is properly included in the capital structure, we see flaws in both presentations. First, it is not clear why the Company could not maintain a level of short-term debt at least equal to its unrecovered ERAM and FCA balances. This amount would appear to be well within its current borrowing ability and not in any way close to violating either its Indenture limits or its FERC cap.

This would also comport with the intent of Chapter 34 and our ERAM Order that such balances be financed with short-term debt and that recovery take place outside of base rates. We see no evidence of any substantial problem with financing flexibility by pursuing such a course of action. We note that CMP had $88.5 million of short term debt outstanding at the end of the test year, when its unrecovered ERAM and FCA balances were about $100 million. Thus, employing an amount of short term debt equal to the combined ERAM/FCA balance does not seem to impose an undue hardship on CMP.

We regard Dr. Lurito's short-term debt recommendation as falling outside the bounds of reasonableness. While we agree that short-term debt represents the lowest cost source of capital, its use is limited for financial and legal reasons. In most cases, we would consider the use of some amount of short-term debt in the capital structure as a prudent course of action which utilities should follow. In the instant case, we are concerned about the Company's ability to obtain additional amounts of low-cost short term debt, given its recent ratings downgrade. Admittedly, that downgrade applied only to long-term borrowings, but as a practical matter that bond rating downgrade is likely to constrain to some extent at least its access to short-term debt and will likely lead to a higher interest rate being charged to CMP. In sum, we do not believe it is wise for us to prescribe a capital structure that is apt to jeopardize the Company's financial integrity and flexibility. Due to the length of the deferrals for a portion of the FCA and ERAM balances, it is not unreasonable for some medium term note financing. Because of the way our rules work though, we assign short-term debt only to financing these deferred balances. In order to make CMP whole, we have to consider the impact of our Rules.

For rate base financing purposes we will include no short-term debt in CMP's capital structure. Thus, we make the assumption that on an overall Company basis, CMP will have outstanding an amount of short-term debt equal to its uncollected ERAM and FCA balances. This amount would be higher than the level CMP has projected by about $60 million, but we believe it to be within reasonable bounds of financial safety and flexibility. When these changes are made, we believe that the resulting capital structure is reasonable for ratemaking purposes.

As discussed earlier, the absolute dollar amount of capitalization needed by CMP is inconsistent between the Company and the Advocate Staff. Because we believe the Company has better estimated its overall capitalization level (and because we cannot find Dr. Lurito's final capitalization amounts in the record), we will use the amount shown on Revised Exhibit BROOKS-17 in the "Adjusted Average Balances" column as our total capitalization amount. If anything, this amount is likely to be slightly overstated, because the Company may not spend its full construction budget as this exhibit assumes. Thus, there would be a smaller need for funds. Further, the exhibit appears to assume that CMP will have retained earnings based on receiving its full requested rate increase. We know that that assumption is incorrect. Nevertheless, we feel comfortable in using the overall average, because CMP has already committed to the debt issues and the preferred stock level contained in the exhibit and because we are assuming that all of the ERAM and fuel deferrals are financed by short-term debt.

Because we are assuming no short-term debt for ratemaking purposes in this rate case, the difference between our capital structure and the Company's must be reconciled. We will proportionately reduce long-term debt, preferred stock and common equity by this difference. This methodology produces a capital structure that is more likely to meet CMP's need for financial integrity while also not being unduly costly to ratepayers.

As we decided earlier, we will use an average rate year amount for our overall capitalization amount. Because of the amortization of some capital leases and because of the maturity of some MTNs, the Company will have an average amount of long-term debt outstanding that is greater than the year-end amount.

Regarding common equity, $540.68 million, or 43.74% of total capital, is included in the capital structure. The recommended capital structure is shown below.

Prospective Capital Structure

($000's)

Capital Component	Amount	Percent Total
Short-Term Debt	$ 000	0.00%
Medium Term Notes	$ 120,630	9.76%
Pollution Control	29,320	2.37
Capital Leases	39,520	3.20
Mortgage Bonds	367,140	29.70
Long-Term Debt	$ 556,610	45.03%
Preferred Equity	$ 138,820	11.23
Common Equity	$ 540,680	43.74
Total Capitalization	**$1,236,110**	**100.00%**

C. Short-Term Debt

For ratemaking purposes in this rate case, no short-term debt is included in the capital structure.

D. Long-Term Debt and Preferred Costs

The Company, through its witness Mr. Brooks, and the Advocate Staff, through its consultant, Dr. Lurito, have developed up-to-date estimates of the cost of long-term debt and preferred stock. In their direct testimony, both Dr. Legler and Dr. Weil adopted the Company's cost rates; neither chose to participate in the various rounds of updates and therefore we will not discuss their recommendations further.

Regarding the cost of long-term debt and debt equivalents, CMP supports a proposed cost of debt of 7.26%. Advocate Staff supports a cost rate of 7.25%. We will adopt Dr. Lurito's estimate of 7.25% in order to be consistent with the approach we adopted in CMP's last rate case.

The witnesses differ as to the projected cost for Series T, however. Mr. Brooks estimates an "all-in" cost of 7.104%; Dr. Lurito believes the cost will be 6.75%. Mr. Brooks apparently bases his cost on a belief that interest rates in general are likely to rise and that Series T will be a 15-year issue, as compared with the recently issued Series S which was a 5-year instrument that cost CMP 6.06%, inclusive of all fees. Dr. Lurito looks at CMP's most recent costs of mortgage issues and at his own forecast of the direction of interest rates in order to arrive at his cost estimate.

For the cost of this debt, we will accept the Company's projections, except for Series T mortgage bonds. Mr. Brooks estimated the stated cost for this issue to be 7.0%, with an effective cost of 7.104%, while Dr. Lurito believes that CMP should be able to obtain this borrowing at a stated rate of 6.75%. Mr. Brooks bases his projected cost on the possibility that rates will rise, and because CMP paid a 6.06% effective cost rate on its recently issued 5-year notes, while Series T is expected to have a 15-year maturity. Dr. Lurito sees no reason to believe interest rates will rise as much as projected by Mr. Brooks in the time frame during which CMP expects to accomplish the borrowing. We believe Dr. Lurito paints a more plausible picture on the level of rates, and so we will adopt his recommended 6.75% rate for Series T. However, it does not appear that Dr. Lurito included any issuance expenses, so we will add to the stated rate the same .104% that Mr. Brooks assumed in his projection. The effective cost becomes 6.854%. Based on our finding with respect to the Series T mortgage bonds, we will adopt Dr. Lurito's estimate of 7.25%.

Regarding the cost of preferred stock, CMP witness Mr. Brooks estimates that the cost of preferred stock is 6.911%. Advocate Staff's consultant, Dr. Lurito, estimates that the cost of preferred stock is 6.430%. The major difference between Advocate Staff and the Company relates to whether the money market preferred should be "flexed" from a 49-day rate to a 5-year rate. On November 16, 1993, the Company flexed its money market preferred to a 10-year dividend, with a 20% mandatory sinking fund starting in 1999, and a resulting 8-year average life. That issue now has an effective cost of 8.539% (excluding certain legal bills which CMP has not yet received). With the inclusion of that issue, CMP's weighted average cost of preferred stock is now 7.640%. The Commission takes official notice of the case file in Docket No. 93-132 and finds that CMP's weighted average cost of preferred stock is 7.640%.

E. CMP's Fair Rate of Return

Having discussed all the components of the capital structure and their respective cost rates, we summarize our results, which indicate an overall cost of capital of 8.71%.

CMP's Prospective Cost of Capital

Capital Component	Percentage	Cost Rate	Factor
Short-Term Debt	0.00%	0.00%	0.00%
Long-Term Debt	45.03	7.25	3.26
Preferred Stock	11.23	7.64	0.86
Common Equity	43.74	10.55	4.61
Total	100.00%	-	8.73%

The above cost of capital estimate did not include the 50-basis-point penalty required in Docket No. 92-102. When that penalty is reflected in the cost of equity, thereby lowering the allowed cost of common equity from 10.50% to 10.00%, an overall allowed fair rate of return of 8.52% results.

CMP's Prospective Cost of Capital

Capital Component	Percentage	Cost Rate	Factor
Short-Term Debt	0.00%	0.00%	0.00%
Long-Term Debt	45.03	7.25	3.26
Preferred Stock	11.23	7.64	0.86
Common Equity	43.74	10.00	4.40
Total	100.00%	-	8.52%

In our opinion, the overall cost of capital of 8.52% is a reasonable, prospective fair rate of return for CMP. We specifically find that: 1) this rate of return is adequate to maintain the Company's financial integrity; and 2) this rate of return adequately addresses the impact of purchased power obligations on the appropriate cost of capital and capital structure. The Company has alleged that its financial integrity could be damaged by the failure of the Commission to provide an adequate increase in rates to the Company. We find that the rate increase granted in this order is adequate to meet the Company's need for adequate financial integrity and flexibility. Our confidence is due in part to the Company's minimal need for additional external financing and its generally adequate internal cash flow generation. The Company has also failed to present compelling evidence that its purchased power obligations have had a material impact on its cost of capital. Further, there has been no compelling evidence presented that would suggest that the exclusion of the "debt-equivalent" relating to CMP's purchased power obligations would result in a significant misestimation of CMP's cost of capital. For these reasons, we believe that the capital structure and cost rates set forth above are appropriate for CMP. We believe that this return level, which is within the broad range of reasonableness established by the record in this case, appropriately balances ratepayer and shareholder interests.

VI. TEST YEAR ADJUSTMENTS AND ATTRITION

Robert E. Tuoriniemi and Paul A. Dumais presented Prefiled Testimony (CMP Exhibit 10) for CMP on the subject of Revenue Requirements. In its Direct case, CMP proposed 30 Net Operating Income (NOI) adjustments and 16 Rate Base (RB) adjustments. Two of the net operating income adjustments (#'s 18 and 30) had no amounts included but were shown because the Company wanted to reserve a spot in the event that quantifications became possible at a later stage of the proceeding. The Company's net operating income adjustments reduced test year net operating income by $42.24 million and increased Rate Base by $81.236 million. Based on the Company's requested weighted cost of capital (as proposed by Mr. Brooks) of 9.849%, the Company calculated a test year return deficiency of $48.9 million which translated into a required retail revenue increase of $80.734 million.

The Company also presented an Attrition study (CMP #13) sponsored by Mr. Dumais. Based on his projection of Rate Year revenues, expenses and rate base, Mr. Dumais calculated that CMP required a further increase of $13.9 million in order to offset the claimed effects of attrition during the first year that new rates are due to be in effect. In total, CMP requested that its retail rates be increased by $94.64 million.

For the Advocate Staff, Thomas S. Catlin filed direct testimony (Staff #21) and Exhibits (Staff #22) on Revenue Requirements and Attrition. Based on his analysis and using the overall cost of capital as presented by Dr. Lurito, Mr. Catlin proposed that CMP be granted a test year revenue increase of $39.175 million and an attrition increase of $2.558 million, for a total increase of $41.733 million.

On behalf of the Office of the Public Advocate (OPA), direct testimony regarding revenue requirements and attrition was filed by Thomas E. Knudsen and Michael A. Bleweis (OPA #76). After modifying Dr. Lurito's recommended cost of capital by lowering the allowed return on common equity, and after conducting their own analysis of CMP's tests year results and proposed adjustments, the OPA witnesses proposed that CMP be granted a revenue increase of $22.331 million and no further allowance for attrition. As will be discussed later in more detail, the OPA witnesses recommended that only those post-test year adjustments which were legal or contractual in nature should be included in the revenue requirement calculation. Thus, OPA conducted no explicit study to determine if an attrition adjustment was warranted.

On behalf of the Department of the Navy (Navy) Ralph C. Smith presented direct testimony (Navy #15) on a limited number of revenue requirements issues. Mr. Smith recommended that certain adjustments proposed by CMP be rejected, and that certain other adjustments, not offered by CMP, be included in the revenue requirement calculation.

CMP's Updated and Rebuttal Testimony (CMP #32) was presented by Mr.'s Tuoriniemi and Dumais. In their prefiled rebuttal, they modified CMP's original request, so that the Company's test year required revenue increase was shown to be $69.822 million, using the revised overall cost of capital from Mr. Brooks. In addition, Mr. Dumais revised the Company's attrition request to

$12.315 million. Thus, CMP's total request was $82.137 at the prefiled Rebuttal stage. Before the beginning of cross-examination on their rebuttal testimony the CMP witnesses stated that several further modifications would be necessary to the amounts shown in their exhibits. These revisions were entered into evidence as CMP #65 in response to Oral Data Request #91. CMP's final positions as expressed in its Brief were quantified in CMP #65. The Company's final request is for a tests year revenue increase of $72.569 million and an attrition-related increase of $10.845 million, for a total requested retail revenue increase of $83,414,000.

For the Advocate Staff, Mr. Catlin filed surrebuttal testimony (Staff 28) and Exhibits (Staff 29) which indicated that, using Dr. Lurito's updated cost of capital calculation, a test year revenue increase of $40.187 million was appropriate for CMP, and that an attrition adjustment of $4.380 million was indicated. Thus, the Advocate Staff's total proposed increase was $44.567 million. In the text of his surrebuttal testimony, Mr. Catlin recommended that in view of the findings of the management audit, as presented by Advocate Staff witness Ms. Alexander, and considering the relatively small dollar amount which his attrition analysis showed, "the Commission should limit the rate increase to reflect only the test year revenue deficiency." Mr. Catlin went on to cite Dr. Stutz's testimony as an alternative reason to reject any attrition adjustment. In its Brief, Advocate Staff recommended that CMP be granted a revenue increase of $28,206,000.[7] This amount represents the sum of the test year increase calculated by Mr. Catlin as $40.419 million and his attrition results which indicated that a $12.213 million decrease was required. The attrition result included recognition of $17 million in savings due to the management audit recommendations.

Mr. Knudsen filed surrebuttal testimony (OPA #89) on behalf of the OPA. Based on his test year analysis, he recommended a revenue increase of $20.897 million be granted. As in his direct testimony, Mr. Knudsen recommended that no attrition adjustment be given. In addition to his earlier arguments regarding no adjustments beyond the test year, Mr. Knudsen argued that the potential savings identified in the management audit should be more than sufficient to offset any possible attrition that may occur. In its Brief, based on several revisions and corrections, OPA recommends a revenue increase of $19,248,000. The OPA used

[7] The Advocate Staff's recommended revenue increase of $28,606,000 includes attrition of $4.380 million (which is netted against the $17 million management audit adjustment), even though in its brief, Advocate Staff recommends that no attrition adjustment should be made.

Dr. Lurito's cost of capital recommendations, except that no issuance cost or flotation cost adjustment was made to the bare-bones cost of equity recommended by Dr. Lurito.

In its Brief, the Navy addressed only certain specific net operating income issues. It did not present an overall recommended revenue requirement. Further, to provide a benefit to ratepayers given the depressed state of the Maine economy, and to place more pressure on the Company to undertake cost-cutting measures, Navy recommends that no attrition allowance be granted.

A. <u>Test Year Adjustments</u>

No party has disputed the Company's use of 1992 as its test year. The OPA has argued that the test year concept should be enforced rigorously under the current economic circumstances, and that only post-test year changes which have a legal or a contractual basis should be allowed. The OPA has employed its theory fairly consistently throughout its presentation, no matter what effect the rejection of a proposed adjustment has on the Company's revenue requirement. No other party has adopted this rigid interpretation of the test year approach, which this Commission has long used in setting revenue requirements. The use of an historic test year, adjusted for known and measurable changes, has been a stable ratemaking principle in Maine for many years. Thus, we reject the OPA premise that known and measurable changes beyond the test year should be excluded merely because of their timing. We prefer to use a level of operations approach, which says that we will recognize the effect of changes to the Company's test year net operating income, rate base and capital structure, as long as there is sufficient certainty that the change either has occurred since the close of the test year or will occur during the first year when the new rates are to be in effect. Furthermore, we will only accept adjustments that will upset the existing balance between revenues, expenses and rate base. Besides the probable likelihood of occurrence, the change must be quantifiable with a high degree of accuracy. Changes of this type are premised on the assumption that the utility will operate at essentially the same level as it did during the test year. Unless it can be shown with certainty that that assumption is false, changes to the company's output levels will not be permitted as known and measurable. Changes to the input factors of production are acceptable as test year adjustments.

B. <u>Attrition</u>

The purpose of an attrition analysis is to try to determine whether the utility will have a reasonable opportunity to earn the allowed return as calculated under the test year (with known and measurable changes) concept. In effect, attrition goes beyond the test year into the rate-effective period. It encompasses changes to the Company's level of operations, such as an increasing number of customers and/or employees. It examines the balance between growth in revenues, expenses and rate base. It is done in the realm of uncertainty, because while the events portrayed in an attrition analysis must have some likelihood of occurrence, they are based on projections or forecasts. We recall the old axiom that the best that can be said about forecasts is that they are sure to be wrong in some respect. We have always examined attrition results with a high degree of skepticism, and we will do so in this case. We will examine each adjustment proposed by CMP, as well as the overall result of the attrition study, with great care.

In their Briefs, all parties other than CMP recommended that no attrition allowance be permitted. Their arguments were similar: economic times are tough in Maine and customers are having a difficult enough time as it is in paying electric bills; attrition is speculative by nature; the Company's forecasts, particularly its sales forecast, are not credible; inflation remains low; and the management audit has shown that CMP has not been as diligent as it should have been in cutting costs. Further, in selected areas, the audit provides guidelines for the Company to follow in achieving reduced expenses. We will address the parties' contentions and CMP's responses as we proceed through the attrition analysis in Section VII.

C. Test Year Net Operating Income and Rate Base Adjustments

Before beginning our discussion and analysis of the specific adjustments proposed by CMP, we wish to clarify several matters. When discussing "parties" we are referring to CMP, the Advocate Staff and the OPA; for those adjustments where Navy made a recommendation, we discuss its position specifically. We also must point out a numerical discrepancy which exists throughout our analysis. The schedules provided by OPA with its Brief were derived from CMP's rebuttal filing (CMP #32), rather than from CMP's revised calculations, as contained in CMP #65, which were offered in response to ODR #91. Thus, even when OPA accepts an adjustment proposed by the Company, it may not have the correct amount for the net operating income or rate base effect. The most common reason for any difference lies with the effect of the increase to the Federal Income Tax ("FIT") rate from 34% to 35%. At the rebuttal stage, CMP had not reflected the FIT effect on the individual adjustments, but it did so in CMP #65. OPA failed to reflect this, as well as any of CMP's revised amounts, on the schedules which accompanied the OPA brief. We understand that this was caused by the late arrival of CMP #65. Finally, when an net operating income adjustment also has rate base effects, we will discuss the two effects simultaneously. The working capital adjustment is the one which has only rate base effects, but we discuss it where the Company presented it in the net operating income section of our test year discussion.

Several of the adjustments proposed by CMP were accepted completely by the parties. Those are the following:

NOI #3 Equity Earnings
(In its Brief re: NOI #3, OPA included proposed adjustments to reduce CMP's share of Maine Yankee advertising expense and to exclude CMP's share of costs associated with the MY Information Center. We discuss these proposed adjustments at NOI #14.)

NOI #4 (RB #2) Standard Income Taxes

NOI #5 ERAM & DSM

NOI #6 FCA Interest

NOI #7 FERC Audit Reclass

NOI #8 Miscellaneous Tariffs (*)
(We note that the Advocate Staff indicated in its Brief that it had reached an agreement with the Company that CMP would withdraw the proposed tariff increase to the after-hours reconnection charge. CMP states its concurrence with this modification, but gives no quantification. The Advocate Staff stated that the NOI effect is $32,000, and we use that amount.)

NOI #10 (RB #4) Gains on Property Sales

NOI #18 (RB #17) QF Buyouts

RB #6 Mason Station (OPA used a different NOI #16 effect)

RB #16 Miscellaneous adjustments (from NOI #29). (The NOI effects of #29 were disputed.)

1. <u>NOI #1. Interest Synchronization</u>

No party has disputed the necessity of making this adjustment which affects the current state and federal income tax calculation. Each party has used its own proposed rate base amount and weighted cost of debt in calculating the amount of the adjustment. We will do likewise in our calculation.

2. <u>NOI #2. Working Capital</u>

The inclusion of an allowance for working capital has been standard practice at this Commission for many years. This addition to the utility's rate base is necessary to allow the utility to recover the costs associated with funds supplied by investors above the amount which supports the utility's plant and equipment. A utility must pay for the goods and services it purchases at intervals prescribed by its many suppliers. In similar fashion, the utility receives payment from its customers after it has furnished the electricity to the customer. The differing intervals between the rendering of goods or services and the payment by the purchaser gives rise to the need for a cash working capital allowance. The Company has use of the goods and services it buys for a certain length of time before it must pay the bill. This is known as the expense lead. Conversely, ratepayers do not receive a bill nor pay for their electricity until some time after the power is supplied to them. This is called the revenue lag.

No party in this case disputes the need for a cash working capital allowance, and CMP presented a lead/lag analysis which was also generally accepted. The purpose of the lead/lag analysis is to determine the actual expense lead and revenue lag days experienced by the Company. The only adjustment made to the Company's study was a change by the Advocate Staff and the Navy to the Operations and Maintenance ("O&M") expense lead days in order to eliminate transportation depreciation from the analysis. Of course, each of the parties used its own adjusted test year amounts for the various expenses included in the working capital calculation. It appears that each of the parties also used its own weighted debt cost and rate base to determine the amount of interest expense included in working capital. We will perform our own calculation based on the adjusted test year results and capital structure and capital costs found in this Order. We will use the net lead/lag days as adjusted by the Advocate Staff, because we agree with the change proposed by the Advocate Staff and Navy to O&M lead days.

In addition to the cash portion of the working capital allowance, the Company's investment in inventories has regularly been included in rate base through the working capital analysis. CMP must keep a supply of fuel on hand at its generating stations, including its nuclear plants, and it must have repair materials and supplies available. The average amount of inventory on hand during the test year is included in rate base. This is apparently the only instance in this entire proceeding where all four parties agree not only on the propriety of the theory, but also on the actual numbers to be used.

CMP also provided an amount to be deducted from the test year average inventory in order to recognize the effect of removing all inventory from Mason Station. The Advocate Staff and the OPA also use the CMP amount, as will we in our calculation.

The final group of items which CMP proposed to include in its working capital allowance are those related to rate base amounts. The Commission has rejected similar proposals in prior cases, but CMP decided to attempt, once again, to convince us to change our thinking. In its original filing, CMP included amounts for Deferred Income Taxes, Depreciation and Amortization, Other O&M Amortization, Nuclear Fuel Expense, Retained Earnings on Common, Dividends on Common, and Property Additions. In its final request, CMP removed the two parts of the adjustment having to do with Common Equity. Thus, five rate base related items remain in the CMP proposal at a net addition to rate base of $6.45 million.

CMP claims that the four expense related items must be included because the items result in a reduction to rate base prior to the Company's receiving cash from ratepayers for the expense. Because of this lag between the expensing of the amount (and its concurrent effect of rate base reduction) and the Company's receipt of cash from its customers, CMP claims it must be compensated for the time value of the expense. CMP further asserts that it examined all balance sheet items to determine if any others had a significant effect on the Company's need for working capital. The only item which the Company found to fit this category was property additions. This item is included in order to recognize that the Company includes the amount in gross operating property before CMP pays the vendor. In its direct testimony, the Company witnesses stated that they had not specifically analyzed the average time lag between an item's inclusion in operating property and the payment by CMP. However, the witnesses stated their belief that the types of items being purchased were similar in nature to those included in the Other O&M category, so the Other O&M expense lead days were used. Finally, CMP's witnesses stated that the Company had not analyzed the operating property additions which were included in Construction Work In Progress ("CWIP"), but that it would do so if the Commission were to accept the Company's argument that rate base related items should be included in the working capital calculation.

The Advocate Staff, OPA and Navy all recommend that the Company's proposal to include rate base related items in the working capital calculation be denied, and all use similar reasoning. Basically, those parties believe it is inappropriate to include items which are unneeded in the cash working capital allowance. The past Commission practice of excluding these amounts should be continued. The Advocate Staff refers to the Commission's Order in Docket No. 90-076 to agree that inclusion of certain non-cash items may have merit, but that CMP has not thoroughly examined all cash flows and balance sheet effects. The OPA and Navy basically rely on the theory that only transactions that affect actual cash flows should be reflected in this analysis.

Obviously, this debate has been presented to us before. The answer depends on the definition of working capital for rate base purposes, not the definition commonly used in accounting circles. We continue to believe that the definition which we have used in the past, and the reasons behind it, are still valid. We are not convinced that the Company has an actual need for cash simply because of the timing of the accrual entries and the receipt of cash for the expense.

Ignorance of the timing of principal payments on medium- and long-term borrowing leaves us unconvinced as to the need for a working capital allowance on rate base items. While we agree with CMP's assertion that depreciation reduces the rate base as expense is recorded, we observe that the Company does not reduce its outstanding borrowing at the same time. Rather, the capital structure remains unchanged and the utility has the use of the funds even after the revenue requirement is reduced through accumulated depreciation. In sum, we reject the Company's proposal to include rate base related items in the working capital allowance.

3. NOI #8 & RB #3. Kennebec Hydro Resources ("KHR")

This is an accounting adjustment that restates the results of KHR, a subsidiary of CMP, from the equity accounting method to a utility property method to show the net operating income and rate base effects of CMP's investment in KHR. The Advocate Staff agrees with this adjustment. The OPA indicates acceptance of the adjustment in its brief at page 99. However, the schedules accompanying the OPA brief show a net operating income adjustment of $-137,000 to the amount put forth by CMP. The adjustment first appeared in the surrebuttal exhibits of Mr. Knudsen. There is no discussion of this adjustment in either Mr. Knudsen's surrebuttal testimony or in the OPA brief. We surmise that the exhibit may reflect only test year amounts in order to be consistent with other revenue adjustments used by OPA.

We accept the Company's proposed adjustment for KHR.

4. NOI #11. Price and Volume Changes

CMP proposes this adjustment to reflect: (1) the effects of operational changes at three industrial customers;(2) the December, 1992, rate changes approved by the Commission; (3) wholesale rate changes; and (4) the effect of the non-migration of some customers from the MGS to the SGS class. In its brief, CMP says it no longer supports the Madison Paper Industries ("MPI") part of the adjustment, as was included in (1) above, because MPI has notified CMP that it wants to leave the CMP system. The Hearing Examiners ruled that, because the lateness of when it was proposed would prejudice the other parties, the MPI situation would not be considered in this docket.

The Advocate Staff accepts the adjustment completely as proposed by CMP, including the MPI effect. Additionally, the Advocate Staff points out that MPI will be providing additional revenue for a substantial portion of the rate year and MPI's leaving is not a certainty.

OPA excluded the MPI part of this adjustment, not based on CMP's reasoning, but rather to be consistent with the OPA's no-post-test year adjustment principle to which it adheres. Although not discussed in its brief, the OPA exhibit shows that CMP's proposed adjustment to Airco's revenue amount should be rejected. In Mr. Knudsen's direct testimony, he recommended rejection of this portion of the adjustment unless the Commission were to issue a decision in the Airco Special Rate proceeding (Docket No. 92-331) prior to the end of the rate case. Even though the Commission issued its Order approving the Airco contract on September 22, 1993, the OPA brief exhibit continues to include rejection of the Airco adjustment offered by CMP. OPA also does not address the MGS/SGS issue, presumably because it was first quantified by CMP in CMP #65, its updated final position.

We believe the proposed adjustment reasonably reflects known and measurable changes, and we therefore accept it.

5. NOI #12. Capacity and Energy Sales

This adjustment removes the test year effect of a FERC Order reducing a previously ordered refund for several wheeling transactions. Also included is the rate year effect of a newly signed wheeling contract with MMWEC. The Advocate Staff accepts the adjustment.

The text of the OPA brief and the accompanying exhibits are inconsistent on this issue. The brief at page 37 indicates acceptance of both parts of the adjustment, noting that the MMWEC agreement represents a contractual post-test year change. However, the net operating income summary exhibit (3RD REV.SCH. TEK-9) includes an amount ($90,000) which removes the net operating income effect of the MMWEC contract.

We accept the proposed adjustment as a known and measurable change.

6. NOI #13. Wheeling Revenue and Expense

The purpose of this adjustment is to reflect the revenue and expense effects of changes which CMP claims will occur to various wheeling agreements. The Advocate Staff accepts the proposed adjustment in its entirety. The proposed adjustment reduces test year revenues by $855,000 and reduces expenses by $158,000, with a net operating income effect of $413,000.

The OPA recommends rejection of two parts of the proposed adjustment (concerning Maine Public Service and MMWEC) because they are of a non-contractual post-test year nature.

This type of adjustment has been proposed and accepted in prior rate cases. However, it is an adjustment which has troubled us because it is subject to much uncertainty. Load characteristics (both level and location), unit operations, and market-based prices for and availability of power all affect the amount of wheeling which will occur into, out of, and through CMP's transmission system. While CMP seems convinced that no market for power will be present during the rate year, there is no way on knowing how aggressive sellers might be or if system operating problems or load growth could cause other utilities to enter the power market as purchasers. We hesitate to approve this type of adjustment, only to have CMP enter into new wheeling agreements and receive additional revenues. One option would be to order a full reconciliation of these revenues and expenses, but we are reluctant to do so for many reasons, especially in light of the strong probability that CMP will be subject to an incentive regulatory scheme in the not too distant future.

Rather than try to guess the amount of wheeling which is likely to occur during the rate year (and for which we have no evidence), we will reject the proposed adjustment, and continue to recognize the test year amount of wheeling related revenue and expense for ratemaking purposes. We recognize that the specific events enumerated in the Company's proposed adjustment may rise to the level of "known and measurable." However, past experience tells us that other changes are just as likely to occur to wheeling amounts.[8]

Proposed Adjustment NOI # 13 is rejected.

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[8] ision to reject the adjustment. This unresponsiveness precluded our careful examination of CMP's transmission capacity and usage for retail customers.

7. NOI #14 & RB #5. Maine Yankee ("MY")

By proposing this adjustment CMP seeks to begin recovery of its share of the deferred and ongoing effects of the expenses associated with the termination of supply contracts between MY and Homestake Mining and with Cogema. Recovery of these costs was removed from the fuel clause per the Commission's decision in Docket No. 91-091. In its direct filing, CMP sought to change the time period used to normalize MY refueling outage costs from 19 to 18 months, but this request was subsequently withdrawn.

The Advocate Staff accepts CMP proposal as modified to continue the 19-month outage interval normalization. However, the Advocate Staff also proposes that all expenses associated with the MY Energy Information Center ("EIC") be disallowed because they are really a type of institutional advertising for which recovery is prohibited under Chapter 83 of the Commission's Rules. The Rule allows recovery from ratepayers only upon specific exemption by the Commission. The Advocate Staff reviewed much of the literature available at MY, as well as the presentations made to visitors to the EIC. The Advocate Staff believes the operation of the EIC, which provides information about nuclear energy in general and MY in particular, is clearly promoting good will toward the plant. The Advocate Staff points out that as far back as 1987 (Docket No. 87-181) the Commission raised concerns about whether MYEIC costs should be recovered from CMP ratepayers. The Commission decided that the issue would be taken up in CMP's "next general rate case proceeding." However, the issue was not raised in CMP's first rate case subsequent to that Order (Docket No. 90-076). CMP has continued to report the amounts for the MYEIC as "contested" institutional advertising in its Chapter 83 reports, as ordered by the Commission.

The Advocate Staff argues that since the issue has never been explicitly addressed in a Commission order, it is clearly ripe for adjudication. The Advocate Staff also points out that it raised the issue in its direct case, thus meeting its burden of production and requiring CMP to assume the burden of proving that the costs are rightfully recoverable from ratepayers.

CMP believes that MYEIC provides valuable information to the public on the operation of MY and on public issues, such as nuclear waste disposal. Further, CMP argues that the Advocate Staff relied solely on a report from the 1987 case as the basis for recommending disallowance. Because that report is not part of this record, CMP argues the Advocate Staff failed to meet its burden of production.

The OPA accepts the inclusion of only those contract termination payments through the end of the test year. The OPA further proposes two adjustments to CMP's MY expenses. First, the OPA would disallow over half of MY's test year advertising costs, on the theory that MY spends substantially more on advertising than any of the other Yankee plants. In addition, OPA would disallow all costs for the EIC, arguing that the MYEIC is the functional equivalent of the Seabrook Info Center, for which the Commission disallowed recovery by CMP in Docket No. 82-266. The OPA states that CMP has provided no basis for passing these costs on to ratepayers, and that the information provided by the EIC is not necessary for the production of electricity at the plant.

We agree with the Advocate Staff and the OPA regarding the MYEIC issue. Merely because the issue was not decided in Docket No. 90-076 does not preclude us from ruling on it here. We find that the Advocate Staff and the OPA both met the burden of production, and it was CMP's responsibility to justify the recovery of these expenses. CMP has not done so. While the activities of the EIC do provide information to the public, much of that information goes toward reassuring the public about the safety and reliability of the plant and nuclear power. Further, as with the Seabrook Information Center, the EIC is not necessary for the operation of the plant, which is licensed by the NRC through 2008.

We accept the modification to CMP's proposed adjustment as presented by the Advocate Staff. The Homestake and Cogema termination payments are acceptable as known and measurable adjustments. The Advocate Staff calculation of the EIC costs was based on a data response which showed the specific items and amounts applicable to the Information Center. The OPA adjustment simply disallows over half of all Maine Yankee advertising expenses without any reasons for selecting the particular amount of disallowance. We find the Advocate Staff calculation better represents the amount which is relevant to the expense being denied. We therefore accept the Advocate Staff recommended change to NOI # 14.

8. NOI #15. Yankee Atomic

The proposed adjustment reduces expenses to a level anticipated during the rate year, in accordance with the 1994 budget submitted to FERC. The plant will no longer be producing electricity and is developing its decommissioning plan. The Advocate Staff agrees with CMP's adjustment.

The OPA recommends that only the test year amount without adjustment be included in the revenue requirement. This would actually increase CMP's revenue requirement. The OPA claims that because the actual test year amount was not available, it used the 1993 budget adjusted for inflation.

In light of the decision to shut down this plant, we find the adjustment proposed by the Company to be reasonably known and measurable, and we accept it.

9. NOI #16. Mason Station

This adjustment has rate base effects which are shown at RB #5. No party has disputed the rate base amounts.

Mason Station remains in a deactivated reserve status. CMP's proposed adjustment removes all test year depreciation expense, as well as any fuel related impacts. Also, the materials and supplies inventory is removed from rate base. At the Rebuttal hearings, the Company proposed to eliminate most heating and maintenance costs and the costs for two employees no longer needed. The Advocate Staff accepts the adjustment as modified by CMP in rebuttal.

OPA Brief recommends that an additional $400,000 of expense should be eliminated from the Company's proposed adjustment. It appears the OPA may have overlooked the modification of $300,000 presented in rebuttal by CMP. OPA witnesses proposed a $400,000 expense reduction in their direct testimony filed in May 1993. This recommended disallowance remained unchanged right into the OPA Brief. CMP proposed its $300,000 expense reduction at the start of hearings in September. If the OPA proposed adjustment were in addition to that proposed by CMP, its final amount would be $700,000, not $400,000 as shown in its Brief. The OPA gave no basis for its proposed additional expense elimination amount. Because OPA did not use the final adjustments proposed in CMP #65, the OPA amount represents only an additional $100,000 in reductions over the Company's final amount.

We will accept the Company's proposed final adjustment, as it appears to have been calculated in a reasonable fashion. No party opposed the Company's proposed adjustment to remove the inventory effects from the working capital calculation. Again, we accept the proposed rate base adjustment.

10. NOI #17 & RB #7. Energy Management Control Center("EMCC")

The purpose of this adjustment is to recognize the Company's additional investment in two new computer systems, the Energy Management System ("EMS") and the Load Management System ("LMS"), as well as associated building modifications. The EMS provides functions related to the control and monitoring of CMP's generating stations, as well as the data link between CMP and NEPOOL. Because part of its functions support the Augusta Power Exchange ("APEX"), some of its costs are shared among the APEX members. The total cost of the EMS is expected to be around $14 million. CMP has reflected the increased depreciation expense in its proposed adjustment, as well as the additional investment in rate base.

The LMS computer system is designed to support the control and monitoring functions for demand-side management and distribution automation measures. Its main purpose was to cycle water heaters as part of CMP's Water Heater Cycling Program ("WHCP"). As originally planned, the program was to have over 80,000 customer participants. The Company has now suspended that program as it evaluates its continued cost effectiveness. The Company decided to go ahead with the contract for the purchase of LMS even after suspension of the WHCP, because the system has other capabilities which could be useful in the area of distribution automation and control and automatic meter reading. The Company cites several reasons in its Brief for continuing with the LMS acquisition, even after the WHCP was suspended. The Advocate Staff has accepted this adjustment entirely.

The OPA does not accept the EMS portion of the adjustment because much of the spending is post-test year and, thus, impermissible for consideration under the OPA test year theory. While a similar temporal issue exist with the LMS, the OPA recommends that this part of the EMCC adjustment be rejected on prudence grounds. The OPA disagrees about the level of supposed benefits available from LMS. It says the system contains so much excess capacity that it effectively flunks the "used and useful" test. OPA asks why ratepayers should be asked to pay for a system which is overbuilt and has few real determinable benefits.

The LMS portion of this adjustment presents a tough call for us. No party has alleged that CMP's original decision to purchase this system was not reasonable. The debatable issue concerns whether CMP was correct in proceeding with the purchase after it chose to put the WHCP on hold. The Company did complete a cost/benefit analysis before proceeding with the purchase. Further, it enumerated several additional capabilities which the LMS may provide. We cannot find that the Company's decision to proceed with the LMS purchase was unreasonable. It did the analysis and quantified the results as best it could. While we are concerned about possible excess capacity contained in this investment, we find that CMP has provided enough evidence to justify the potential future uses. CMP has stated that completing the LMS system to its full capabilities could cost several times the amount of the computer hardware. CMP should be prepared to prove that any continued investment is cost justified. CMP is expected to make the fullest possible use of this system as a means to improve its efficiency.

We will allow the EMCC adjustment as proposed by CMP.

11. NOI #19 & RB #8. Fishways and FERC Licensing

The adjustment reflects the cost of fish passageways at two hydro dams, as well as costs associated with relicensing at FERC of several hydro sites. The Advocate Staff accepts this adjustment.

The OPA disagrees only with the part of rate base and expense associated with one of the fishways, because its expected completion date is after the test year.

The adjustment is accepted as proposed by CMP.

12. NOI #20 & RB #9. Southern Inland Transmission Loop

This adjustment recognizes the investment in a new 31-mile 115 KV loop in York County, which is designed to improve system reliability and reduce line losses. The project is now essentially complete and in service. The Advocate Staff agrees with CMP's adjustment as proposed.

The OPA removes all amounts related to this adjustment, because the line is going into service after the close of the test year.

The adjustment is accepted as proposed by CMP.

13. NOI #21 & RB #10. Work Management System

This reflects the Company's investment in an automated system which is designed to manage the flow of distribution construction projects. The Company also reflected the expected distribution O&M savings and related administrative cost savings which are expected to result. The total projected O&M savings from the system is $837,000.

The Advocate Staff accepts the adjustment, while the OPA rejects it as yet another post-test year change.

The system is reasonably anticipated to be fully operational before the start of the rate year, and the Company has included an estimate of its cost savings. We accept the adjustment as proposed.

14. NOI #22. Distribution Storm Damage

The Company proposed this adjustment in order to normalize the effect of costs associated with clean-up and repairs after major storms, specifically hurricanes. In its Order rejecting the Company's request to defer and amortize the costs of Hurricane Bob (Docket No. 92-019), the Commission stated its belief that normalization was the proper way to account for these irregular, but not unexpected, occurrences.

CMP has proposed to use a 6-year average of storm damage costs, with the amounts expressed in 1992 dollars by applying the GNP Deflator to each year's nominal amount. Hurricane Bob in 1991 was the only major storm which occurred in any of the years used in the averaging calculation. Also, CMP's accounting system apparently did not track specific storm related costs prior to 1987.

The Advocate Staff agrees that an adjustment is appropriate, but disagrees on the use of an inflation-adjusted average. The Advocate Staff found that major storms hit CMP's service territory on average about every seven years, and thus, seven years of history would give a more reliable estimate. Because the Company did not have data for that period, the Advocate Staff used a 6-year unadjusted average as a reasonable surrogate. In addition, the Advocate Staff recommends that a storm reserve account be established by the Company to recognize that the amount included in rates may be significantly different from the costs actually experienced by the Company.

The OPA recommends that the calculation be based on a 10-year inflation adjusted average. Because data are only available for 6 years, OPA uses the relationship between storm damage and total distribution repair over the 6 years for which data is available in order to estimate the storm damage expense level for the four additional years used in its average. The annual amounts are adjusted for inflation using the GDP Deflator.

We find that the Advocate Staff's calculation is the most appropriate of those presented. History seems to show that a 7-year inflation adjusted average would be most representative. However, because the data to calculate such an average are unavailable, the 6-year non-inflation-adjusted methodology of the Advocate Staff is the most reasonable alternative. We see no reason to use the 10-year period used by the OPA when the actual average time between storms is closer to 7 years.

While we will not adopt the storm damage reserve accounting as proposed by the Advocate Staff, this may be the type of expense for which a reserve is well suited. We invite CMP to examine the issue in a future proceeding.

We adopt the Distribution Storm Damage adjustment as proposed by the Advocate Staff.

15. NOI #23. Benefits (ERIP and Pension)

The purpose of this adjustment is to adjust the test year pension expense based on new actuarial projections and to adjust the amortization of the Early Retirement Incentive Program ("ERIP") costs to the level expected in the rate year. The ERIP amortization period of four years began in July, 1991, pursuant to an accounting Order issued by the Director of Finance in Docket No. 91-063. In order to match the expected benefits with the recognition of costs, a sum-of-the-years-digits amortization method was prescribed. The Order noted that it was addressing only the accounting aspects of the Company's request. Further

> The recovery of these costs must be separately addressed in a future ratemaking proceeding. In any future ratemaking case, the Company should, at the minimum, demonstrate that salary savings of a magnitude at least equal to the costs which they would include in the revenue requirement exist.

Order at p. 3; Docket No. 91-063; April 5, 1991.

It is quite clear that CMP had the responsibility to live up to the language in the Order that required positive demonstration of continuing savings. In NOI #23, the Company proposed to reflect the reduction in the amount of ERIP cost amortization from the test year to the rate year. However, the

Company's case presented no evidence that the benefits at least equalled the costs. The only such evidence came in response to a Staff data request (05-Staff-45, which was entered into the record as part of CMP #22 Deposition of Mr. Catlin) which showed that the payroll savings from still unfilled positions would exceed the rate year expense. CMP's Brief argues that CMP must be able to rely on Commission accounting orders in order to be able to defer these types of costs on its books, and the Order in 91-063 gave CMP every expectation that it would be able to recover prudently incurred costs. CMP asserts that it would be unfair to deny the remaining recovery and cause CMP to incur a write-off of $2.4 million.

The Advocate Staff does not dispute the pension portion of the proposed adjustment. However, the Advocate Staff recommends that no further ERIP amortization be allowed, because the cumulative program benefits (in the form of reduced payroll) have already exceeded the costs. Thus, CMP has more than fully recovered its expenditure and any continuing amount reflected in rates would only provide additional benefits to shareholders, not ratepayers.

The OPA recommends adjusting the test year pension expense to reflect what the costs would have been had the revised actuarial assumptions been in place during the test year. The amount is based on an estimate provided in a data response. As for the ERIP amortization, the OPA recommends that a 3-year amortization period be used for the remaining balance in order to recognize that CMP may not have a new rate case by the time the current amortization period is due to end in July, 1995.

While it is clear that CMP failed to provide in its direct or rebuttal cases the kind of evidence required by the Accounting Order in Docket No. 91-063, the Company was able to enter evidence of ongoing benefits from ERIP into the record through depositions. While we do not condone the approach used by CMP, we believe the evidence does meet the requirements of the Accounting Order. No party disputed the accuracy of the offered analysis.

The evidence provided by CMP showed that the ongoing benefits (in the form of payroll savings) continue to exceed the amortized expense of the ERIP. Thus, CMP has met the criteria spelled out on the Accounting Order, and we will allow the amortization of the deferral to continue as set forth in the Accounting Order. While we are allowing this recovery, we remind CMP that an accounting order in and of itself is not a sufficient reason for recovering deferred expenses. The prudence of those costs must be established when recovery is sought.

CMP's NOI Adjustment # 23 is accepted as proposed.

16. NOI #24 & RB #11. Regulatory Assessments

CMP proposes this adjustment in order to recognize two separate elements of expense increase associated with regulatory assessments which fund the Commission and the OPA. First, the Company seeks to adjust the test year expense to an amount estimated for the rate year, based on the statute currently in place which prescribes the total amount of funding for the two agencies. In addition, CMP seeks to recover over a 5-year amortization period costs associated with a 1991 amendment to the regulatory funding statute which provided a special assessment to utilities in order to reclass some Commission funding from the State General Fund to the Regulatory Assessment Fund. CMP makes reference to language in the enacting statute which states that the costs are considered just and reasonable for ratemaking purposes. Company witness Dumais also cited testimony provided by the Commission Administrative Director to the Legislature prior to the Statute's enactment, but the testimony itself apparently is not part of this record.

The Advocate Staff accepts the part of the adjustment which increases the ongoing expense amount, but does not accept the portion dealing with the recovery of the deferred balances. The Advocate Staff points out that the statute language referred to by CMP has been a part of the law for many years in the section dealing with the annual funding of the OPA and PUC. The Advocate Staff argues that the Company had no basis for unilaterally deferring the increased assessment, absent specific Commission authorization to do so.

The OPA would allow only the test year amount of assessment as the ongoing expense level. Further, the OPA would permit CMP to recover the amount of any balances deferred through the end of the test year.

We find it very disturbing that we have come upon yet another case where the Company has chosen to defer costs at its own discretion and inform the Commission well after the fact of deferral. We find nothing in the language of the 1991 special assessment statute which says anything about deferral. This is in contrast to the 1987 special assessment statute for building renovations. That statute specifically permitted amortization with carrying costs provided that the utility filed a rate case before January 1, 1990. The Company's reference to the "just and reasonable" terminology in §116 of Title 35-A in no way justifies its deferral of these costs. That language simply means that any utility is allowed to seek recovery of the assessed amount as part of its revenue requirement, and the amount will not be subject to a prudence review by the Commission. However, the expense has always been treated as any other ongoing cost, that is, the test year amount is included in rates unless a known and measurable change is appropriate. A change in any single element of a utility's cost structure is not a reason for the utility to defer the increase on its own accord.

We accept the adjustment to regulatory assessments as proposed by the Advocate Staff.

17. NOI #25 & RB #12. Energy Conservation

CMP proposes to recover energy management expenditures using the same method that the Commission approved in Docket No. 89-068. Under the stipulation approved by the Commission in that docket, energy management expenses were divided into three categories: (1) labor expenses; (2) "hard" costs; and (3) "other" costs. Labor expenses are the costs for CMP's personnel to carry out each energy management program and are included in the Company's payroll expense. Similar to other operating expenses, CMP projects labor expenses for the rate-effective period and seeks to recover these expenses in rates.

Hard costs are those associated with purchasing or installing demand side management capital assets. The parties to the Stipulation in Docket No. 89-068 agreed that hard costs would be recovered over 10 years which represented the average life of a variety of energy management measures. The Stipulation required CMP to defer hard costs and associated carrying costs until the next general rate case or until the Company sought to recover the costs under the Commission's Chapter 37, Conservation Adjustment for Electric Utilities.

"Other" costs are administrative costs, except labor costs, associated with energy management programs. CMP projects the amount of other costs for the rate-effective period and reconciles the projected costs with actual costs (plus carrying costs) in the next general rate base case. The Stipulation in Docket No. 89-068 did not guarantee that CMP would automatically recover reconciled other costs. Under the Stipulation,

> [t]he Company agrees that, in the event that the Commission finds any of these ["other"] expenditures not to be cost-effective as defined in Chapter 380, the Company will waive any objections to disallowance on grounds of unlawful retroactive

> ratemaking . . . . (Docket No. 89-068, December 29, 1989 Stip. at 6-7)

The Stipulation required that

> the Company's next filing for a general rate increase will document the continued Chapter 380 cost-effectiveness of each energy management program and of its total energy management expenses for which cost recovery is sought including costs not allocated to specific programs. (Id.)

The Company's "next general rate increase filing" was Docket No. 90-076, CMP's Proposed Increase in Rates. In Docket No. 90-076, CMP documented the cost effectiveness of its energy management programs. The Commission's Order in that Docket accepted the Company's proposed ratemaking treatment of deferred conservation costs and allowed CMP ongoing energy management costs for 1990, adjusted for "known and measurable changes."

In its direct case in the current filing, CMP proposed to recover $19.9 million over 10 years for "hard" costs the Company incurred in 1991 and 1992, plus $2.1 million in carrying costs through December 1993. CMP asked for an additional $9.0 million for Power Partners Program costs it expected to incur during the rate year. The total adjustment reduces net operating income by $6.3 million and increases rate base by $13.4 million.

Public Advocate witness Knudsen recommended "that the adjusted test year ending December 1992 be the basis for the revenue determination but that the Commission recognize for ratemaking purposes only those changes in 1993 up to the close of the record that are of a contractual or legal nature." Mr. Knudsen did not judge the appropriateness of deferred costs but proposed the Commission amortize costs over a 15-year period as opposed to a 10-year period. Mr. Knudsen recommended increasing the test year expenses by $1.4 million to reflect amortizing "hard" costs over a 15-year period.

In his direct testimony, Advocate Staff witness Bergeron recommended that the Commission not allow CMP to recover deferred expenditures and ongoing costs for several programs that he argues are (1) not cost effective, (2) do not result in direct demand or energy savings, (3) have been effectively discontinued by the Company, or (4) have completion rates that do not match CMP's requested level of recovery.

By the briefing stage of the current filing, CMP and the Advocate Staff had revised their positions several times with respect to the level of expenditures the Commission should allow in rates.

The Advocate Staff recommends that the Commission disallow certain expenditures for the Company's DSM programs. The Advocate Staff found that in the current proceeding, the Company did not document the cost effectiveness of its energy management programs in its Chapter 120 filing or its direct case. Therefore, the Advocate Staff relied on CMP's Fourth Quarter Chapter 380 Reports for 1991 and 1992 to determine completion rates, energy savings, and whether the Company was requesting recovery of expenditures for programs that are not cost effective. Specifically, Mr. Bergeron recommends that the Commission disallow a total of $64,361 for the Commercial Loan, Good Cents I, Good Cents II, Waldo County Pilot Project, and Residential Weatherization Programs; deny $703,153 in 1991 and 1992 deferred costs associated with the Commercial Audit and Residential Audit Programs; and increase the current level of Power Partners Program expenses by $2.25 million (from $2.44 million to $4.69 million).[9] The net effect is a reduction in CMP's request for ongoing costs of $1.76 million and a reduction in the Company's requested recovery of deferred costs of $89,385, with a corresponding rate base reduction of $547,400, net of deferred taxes.

Commercial Loan Program. The Company's DSM Quarterly Report and past CMP evaluations divide CMP's Commercial and Industrial Retrofit Energy Management Program ("Retrofit Program") into audit, loan, and rebate components. According to the Quarterly Report, the loan component is not cost effective by itself. The Advocate Staff recommends that the Commission disallow recovery of the costs of the Commercial Loan Program because the Company's Demand Side Quarterly Reports show a benefit/cost ratio of less than "1" for this component of the Retrofit Program. However, CMP argues that combining the loan program with the rebate components makes the overall program cost effective.

The Company's Retrofit Program is, in essence, a "one-stop" shopping DSM program. It begins with an audit and may include loans and rebates for various lighting and motor

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[9] CMP proposes to increase Power Partners ongoing other expenses by $4.0 million (from $2.4 million to $6.4 million) (CMP Response to Oral Data Request No. 91)

products. In 1992 and 1993 there has been little activity in the loan segment of the Retrofit Program and CMP incurs little expense in this area. In fact, through June 1993, CMP incurred no expenses for the loan program. Although the Company chooses to track and report data by segment, for practical purposes, the components are not independent. CMP conducts an audit to identify which measures will reduce demand or energy. The Company then determines if the customer may benefit from CMP's rebate program. If not, CMP may offer to help finance the installation of measures through its loan program. It does make sense to combine the individual segments into one program and determine one overall cost/benefit ratio.

In past filings, the Commission has encouraged electric utilities to develop "whole-house" programs and to use "one-stop" shopping marketing techniques. In its May 15, 1991 Supplemental Order in Docket No. 90-076, the Commission criticized the Company for not employing "one-stop" shopping for its residential DSM programs. We believe that CMP's Retrofit Program uses both the "whole-house" and "one-stop "shopping systems. The Commission will allow CMP to continue to reflect in rates its actual 1992 costs for the loan program.

Good Cents I and II Programs. The Advocate Staff recommends that the Commission disallow all expenses associated with the Good Cents I and II Programs because the cost/benefit ratios are .19 and .52 respectively.

The original Good Cents Program was established in 1985 through a Stipulation in Docket No. 85-212. At that time, the Company's Good Cents standards greatly exceeded Maine State Building Standards. In late 1990, CMP's energy impact evaluation found that the Good Cents program was no longer cost effective. In fact, it had a total program cost/benefit ratio of 0.19. In early 1991, the Commission approved CMP's Good Cents II filing. The revised program had a total program cost/benefit ratio of 0.5 through 1992.

CMP has always administered the Good Cents Programs as Chapter 380 programs. The Company calculated energy savings associated with installing energy efficient measures and reported cost/benefit ratios of less than "1" for this program for 1991, 1992 and 1993. CMP argues that the Good Cents Program is

> widely recognized for improving energy efficient new residential construction . . . [and provides] a "valuable connection between CMP and the construction industry in the State. Neither of these

> significant benefits is quantifiable in a way that is recognized under Chapter 380. The Commission should reject the Staff's attempt to read out of Chapter 380 such non-quantifiable benefits of energy management programs.

The parties to CMP's last base rate case raised the issue of CMP recovering expenses for its non-cost effective Good Cents Programs. The Advocate Staff believes that "CMP was certainly on notice that parties object to recovery [of the Good Cents Program]. . . . CMP now offers no support for their recovery."

The Commission has traditionally allowed electric utilities to choose for themselves which DSM programs to implement as long as the programs meet Chapter 380 tests. One of the advantages of demand side management programs over supply side programs is the ease in which DSM programs may be ramped-up or ramped-down depending on capacity and other needs. Maine may have truly needed a Good Cents type program in 1985. However, the Maine State Building Standards are now much more stringent. While we realize the Company's Good Cents II Program uses standards that are more rigorous than Maine State Building Standards, the Good Cents Program has not been even close to being cost effective going back as far as 1990. The Commission is unwilling to approve recovery of any costs for 1991 and 1992 as well as ongoing costs for the Good Cents Program. We do not want to discourage CMP from providing valuable education to new home builders. However, the Company may provide this education in the same manner as it does other non-Chapter 380 energy services.

The Commission is unwilling in the narrow context of the Good Cents Program to grant CMP's request to use "non-quantifiable" Chapter 380 benefits to offset low cost/benefit ratios. We are somewhat puzzled by CMP's request because in the past, the Company has argued that the Commission should not consider "non-quantifiable" benefits for DSM programs when the Company has requested permission to suspend or cancel programs. However, we encourage CMP, and any other party, to suggest how the Commission could use non-quantifiable benefits to improve the mix of DSM programs operated by electric utilities.

<u>Waldo County Pilot Project</u>. CMP terminated this efficient lighting pilot after the Company "had determined that other utilities in the region were proposing similar tests which

might render a separate research project redundant." The Advocate Staff's criticism of CMP's performance in this program is twofold:

> 1) We do not understand why the Company proceeded as long as it did before abruptly terminating the pilot. [and] 2) the Company never filed an evaluation as required by Chapter 380 for pilot programs. . . . [Or] explained how the pilot funds were spent or justified their recovery.

The Advocate Staff recommends disallowing recovery of expenses for this Pilot because the Company did not prove the costs were reasonable and prudent.

The Commission's Chapter 380 allows utilities to operate pilot programs without prior Commission approval. Companies are required to submit evaluations for all pilot programs. CMP should have submitted an evaluation for the Waldo County Pilot Project or requested a waiver from the rule, although it is possible that the cost of evaluating the program would have outweighed the benefit of the evaluation. In hindsight, the Company should have requested a waiver of the rule before it abandoned its plan to evaluate this Pilot. However, we do not want to punish CMP for recognizing when it is appropriate or more efficient to discontinue a program rather than continuing an unviable one. Therefore, we will allow CMP to recover the $16,694 the Company spent on the Waldo Pilot Program.

Residential Weatherization Program. Mr. Bergeron recommends that the Commission allow CMP to recover 1991 and 1992 deferred, hard and other costs for this program because most of these costs were incurred before the Company's Evaluation found that the program was not cost effective. However, the Advocate Staff proposes that the Commission remove the test year level of $25,000 "other" expenses because there has been no activity in this program since mid-1992. CMP states that in February 1993 the Company filed revisions to its program thereby "expressing its intent" to keep the program going in a cost effective manner. Therefore, CMP recommends that the Commission allow the Company to continue test year level expenses.

CMP completed only 12 weatherization measures in 1992 and none in 1993. We see no reason to allow the Company to include any amount in ongoing rates until CMP has an active program. The Commission disallows ongoing expenses of $25,152.

Commercial Audit and Residential Audit Programs. The Advocate Staff maintains that CMP's Commercial and Residential Audit Programs should not be categorized as Chapter 380 energy conservation programs because there are no direct savings associated with audits and CMP has never demonstrated that audit programs are cost effective. The Advocate Staff argues that the Commission should not permit CMP to recover 1991 and 1992 deferred costs. The Company claims that the audits are used to determine eligibility and referral to other energy management programs. In its Reply Brief, CMP argues that

> Staff does not say that these (audit) are not legitimate costs, but says that CMP should not account for these costs as it does for the costs of Chapter 380 Programs. CMP does not object to accounting for the audit program costs respectively in a manner different than that used for the costs of its Chapter 380 programs. However, both in the Docket No. 89-68 Stipulation and in Docket No. 90-076, the Commission accepted CMP's accounting and ratemaking treatment of costs related to the two audit programs along with the costs of Chapter 380 programs. Disallowing the $700,000 of deferred audit program costs for 1991 and 1992 will be inconsistent with that precedent. Furthermore, such treatment will deprive CMP of recovery of legitimate costs that have not been reflected in rates. The Commission should not change the ratemaking treatment of these costs retroactively. (CMP Reply Brief at 20)

We will allow CMP to recover the deferred costs for both the Commercial and Residential Audit Programs. Although the Company deferred these costs as part of its Chapter 380 program costs, CMP routinely completes other commercial and residential audits, the costs of which are charged to management projects for customer services or other categories. We believe it is reasonable for CMP to conduct audits. However, the Commission does not believe that an audit program, by itself, should be included as a Chapter 380 program, because there are no direct savings associated with audits and as a result, audits will not be cost effective under Chapter 380. The Commission will allow CMP to recover the $703,000 in 1991 and 1992 deferred hard costs. The Company shall account for ongoing costs using the same method as it does for customer services audits, and may defer future hard costs for review and recovery in its next base rate case.

Power Partners Program. CMP has two types of Power Partners contracts with energy service companies. One type requires the Company to pay the contractor up-front based on expected energy savings. The expected savings is later reconciled with measured savings. Under the Stipulation in Docket No. 89-068, CMP's payments are treated as deferred "hard" costs and recovered over a 10-year period.

The second type of contract requires the Company to pay the contractor annually for energy savings that are measured throughout the contract period. In the instant case, CMP proposes to treat this type of contract costs as reconcilable "other" costs even though they do not match the definition of "other" costs as that term was defined in the Docket No. 89-068 Stipulation.

In its direct case, CMP requested recovery of \$11.4 million in ongoing Power Partner expenses. Advocate Staff witness Bergeron questioned this level of expenses based on 1993 savings and completion rates. The Company later reduced its request to \$6.4 million after admitting that the original request was based on the most optimistic scenarios which CMP did not expect its contractors to meet. Mr. Bergeron's surrebuttal testimony recommended ongoing expenses of \$4.7 million based on Power Partner program actual energy savings through July 1993.

CMP "requests that the Commission use CMP's projected amounts because the projections are reasonable and because actual non-deferred Power Partners amounts are reconciled with actual revenue. . . . CMP believes that it is unwise to create yet another deferral by artificially lowering projected costs."

The Advocate Staff argues that because the contractor payments are

> reconcilable and CMP is under extreme rate pressure right now, and the actual spending levels are unknown and most recently have been underspent, the most prudent course is the one recommended by Staff: allow into rates only projected payments for those installations that CMP reported were in place by the close of the record. (Staff Reply Brief at 12)

The Advocate Staff also agreed to accept CMP's update of projections through the close of hearings. However, CMP did not provide updated completion rates during the hearings nor did the Company ask permission to submit a late-filed exhibit. The Company did attach a Power Partners completion chart updated through September 30, 1993 to its Brief. (Attachment B to CMP Brief) The Company suggests "[a]t a minimum, the Commission should adopt the latest level of energy savings in adjusting test year non-deferred Power Partners amounts, a position supported by Mr. Bergeron."

The Advocate Staff asserts that its recommended expense levels are based on the most recent figures available in the record at the close of the hearings. It maintains that CMP's updated chart is not part of the record and that parties have not had an opportunity to ask questions about the response.

The Advocate Staff presents strong evidence of the speculative nature of CMP's Power Partners Program completion rates and ongoing expenses. During the course of this case, CMP reduced its request for recovery of Power Partners ongoing expenses by $5.0 million, or more than a 40% reduction from its original request. CMP's updated completion chart is not part of the record and the Commission is unwilling to grant the Company's request to adjust ongoing costs based on an exhibit that parties have not had an opportunity to examine. We believe it is in the ratepayers' best interests for the Commission to be fiscally conservative given the Company's history of underspending its DSM budgets and CMP's opportunity to reconcile Power Partners costs at a later date. The Commission is willing to adjust test year expenses for 1993 known and measurable changes in the record at the end of the hearings as recommended by the Advocate Staff. We will allow CMP to increase the ongoing Power Partners Program costs from $2.4 million to $4.7 million.

18. NOI #26 & RB #13. Electric Lifeline Program ("ELP")

On four occasions during the instant proceeding, CMP modified the amount of ELP expenditures that the Company wants to recover in ongoing rates. In its direct case, CMP asked to recover over three years, its deferred ELP benefits and administrative costs through 1993, and to end the deferral mechanism for ELP expenses.

There are several legitimate reasons why CMP continually revised its ELP adjustment. First, the Commission had an open docket on the Company's Electric Lifeline Program from July through October 1993 and CMP did not know what changes (and resulting costs) the Commission would order for the 1993/94 Program year. (Docket No. 93-156, Modifications to Central Maine Power Company's Electric Lifeline Program for the 1993-94 Program Year) Second, the Company's March 1993 direct case projected estimated ELP benefits to calculate 1993 and ongoing ELP expense levels. By October, CMP could more accurately calculate 1993 ELP expenses and project ongoing ELP benefit levels.

a. ELP Benefits

CMP now seeks to recover $5.6 million in deferred ELP credits (plus carrying costs) through December 1993. CMP wants to recover these deferred expenses, plus carrying charges, over five years.

The Company requests that the Commission allow it to collect $4.45 million in ongoing costs for ELP benefit expenses based on the Commission's final order in Docket No. 93-156 that authorized the Company to spend $4.45 million in ELP benefits for the 1993/94 Program Year (Order at page 36). Although the Commission's final order in the ELP proceeding was not issued until after the record closed in Docket No. 92-345, the Company believes that the Commission can allow it to recover expected increases in ELP benefit levels as a known and measurable change to the test year expenses. CMP points out

> [t]he Commission's Rules state that the Commission may take official notice of facts of which judicial notice could be taken. Commission Rules, Chapter 110, § 927. . . . Because Commission approval of an ELP program, [sic] effective through at least the first ten months of the rate effective year, is an undisputed adjudicative fact, the Commission should take official notice of that fact. (CMP Brief at 82-83)

The Advocate Staff agrees with CMP's request to recover $5.56 million in deferred ELP benefits over five years. It does not support CMP adjusting ongoing rates by $4.45 million to recover annual ELP benefits. The Advocate Staff recommends that the Commission allow the Company to recover $4.08 million in ongoing rates, which is the amount CMP expects to spend for ELP benefits in 1993. The Advocate Staff maintains that the Commission's decision in Docket No. 93-156 was reached after the record closed in Docket No. 92-345 and ". . . after any party was able to discuss the possible implications of that decision on the record in this case." (Staff Reply brief at 16) Furthermore, the Advocate Staff believes that the Commission authorized $4.45 million, but did not mandate that CMP spend $4.45 million. The Company has not spent its authorized amount for the ELP in the first two years of the program, and the Advocate Staff believes that the $4.45 million figure is speculative.

The Commission agrees that CMP has not spent its authorized ELP benefit level since ELP began in January 1992. However, with the changes the Commission authorized in Docket No. 93-156, we do expect the Company to approach its authorized $4.45 million benefit level for the 1993/94 ELP program year. There are generally some delays when new programs are implemented. The ELP is now entering its third year thus reducing the administrative delays and uncertainties that the ELP faced in the first year or two. In addition, the Commission approved a time limit for the Community Action Program Agencies ("CAPs") and CMP to trade and process ELP enrollment information. (Order in Docket No. 93-156 at 11) These changes will allow CMP to operate the ELP more efficiently and increase the likelihood that the Company will approach its authorized spending levels. CMP has also suggested that the Commission will send an "undesirable message" if it disallows ELP expenditures. We believe it is reasonable to allow CMP to recover the $5.56 million in deferred ELP benefits and adjust ongoing rates by $4.4 million for ELP benefits. However, we direct the Company to establish an ELP reserve account to protect CMP and its ratepayers against significant variances between the authorized ELP expense levels included in rates and actual program costs.

CMP should design the ELP reserve account to account automatically for any differences between the revenues received from ratepayers to fund the reserve (e.g., the $4.4 million authorized above) and the amount expended for ELP benefits. The Company should not include administrative costs or savings in the ELP Reserve Account. Any reserve surplus would be treated as a deduction from rate base in future rate cases. The Commission will add net reserve deficiencies, if any, to the rate base in future rates. In the future, assuming that traditional rate-of-return regulation is used, this deferred account will be collected in rates, subject to the standard prudence review, as an addition to rate base and subject to depreciation over twelve months. Thereafter, expenditures that exceed or fall short of the deferred account will be added to or deleted from rate base in a subsequent rate case. In future rate cases or other proceedings, the appropriate reserve accrual based on normalized ELP benefits will be reexamined taking into consideration the reserve balance and actual program benefit experience.

b. Administrative Expenses

The Company included $879,000 in deferred administrative expenses in its latest revenue requirement calculation. CMP wants to recover these deferred expenses, plus carrying charges, over five years. The Company also adjusted its revenue requirement by $358,000 to reflect ongoing annual administrative expenses for the Electric Lifeline Program.

The Advocate Staff does not believe that CMP is entitled to recover any deferred administrative expenses nor collect ongoing administrative expenses in rates:

> The Commission's Order in Docket No. 91-151-C allowed CMP to defer and seek recovery of incremental administrative and benefit expenses, but stated: "Recovery of deferred expenses will be contingent upon the Company proving that the costs were prudently incurred and that the Company has accurately tracked savings generated by the Electric Lifeline Program." (January 10, 1992 Order at 10) CMP's only analysis of savings generated by ELP appears in the Company's July 28, 1993 Impact Evaluation. The Staff identified certain defects in the evaluation that . . . probably resulted in an understatement of savings. Even so, the evaluation found that the monetary value of savings produced by the Program during its first year of operation were about $300,000. . . . CMP has never sought to update its request for recovery of ELP expenses to account for documented savings . . . [and] Barbara Alexander's Supplemental Testimony explains how this should result in an elimination of both deferred and ongoing administrative expenses associated with ELP. (Staff Brief at 60-61)

The Company does not dispute that there are administrative savings associated with the ELP. CMP believes, however, that the savings are significantly less than the annual $54 per recipient savings found by the Advocate Staff. The Company argues that most of the savings identified by the Advocate Staff is from ELP customers making more payments. CMP believes that the net savings from customers making more payments is the elimination of $4 a year in carrying costs. The Company identified an additional $8 in reduced credit and collection costs. Therefore, CMP believes that the ELP produces a $12 net annual savings per recipient. CMP uses this $12 to calculate a $160,000 total savings from the start of the ELP through December 1993 and a projected savings of $115,000 for the rate effective year.

The Advocate Staff claims that CMP never acknowledged or calculated net ELP costs until after Ms. Alexander submitted supplemental surrebuttal testimony on September 16, 1993. The Advocate Staff does not support CMP's calculation of savings it included in the Company's brief.

> The basis of this [ELP savings] calculation is not obvious. The Company purports to calculate an estimate for the proposed ongoing incremental administrative costs to reflect savings in excess of test year levels. These calculations are <u>not</u> in the record and <u>not</u> reflected in the Company's latest update for its revenue requirement needs in this case, CMP ex. 65." (Reply Brief at 17) The Advocacy Staff recommends "[t]he Commission should reject these late-filed attempts to change the Company's request in this case and should therefore adopt the Staff's proposal."

The Commission's ELP review case, Docket No. 93-156 did not explicitly define administrative cost categories nor did the case determine reasonable administrative cost levels. On November 9, 1993, the Commission opened Docket No. 93-289, Inquiry into Data Gathering and Reporting Relating to Low Income Programs for Residential Electric Ratepayers. One of the goals of Docket No. 93-289 is to identify administrative cost categories and levels of administrative expenses. Obviously, the Commission's decision in Docket No. 93-289 will not be made in time to help us decide administrative cost issues in this proceeding. In the meantime, it is reasonable to allow CMP to recover administrative costs, less savings that have been identified as part of the record.

As the Advocate Staff points out, the Commission's January 10, 1992 Order in Docket No. 91-151-C required the Company to justify administrative expenses for the ELP. The Advocate Staff presented strong evidence in the instant proceeding that the Commission should not allow CMP to recover any administrative expenses because the Company failed to document administrative savings. However, the Commission is reluctant to disallow legitimate administrative expenses in light of our concurrent proceeding in the low-income cases. (Docket No. 93-289).

We believe there is sufficient evidence in the record in the instant proceeding to support at least a $12 per customer per year savings from ELP. We are also able to identify the number of customers enrolled in ELP in 1992 and 1993. Advocate Staff witness Alexander testified (and was cross examined) on her testimony that ELP enrollment is expected to equal 9,000 recipients during the third and subsequent program years. For the 1991/92 program year, CMP enrolled almost 6,000 customers in ELP. (October 1, 1992 Summary of Decision and Order in Docket No. 91-151-C) Applying the minimum of $12 savings per customer, there would have been $180,000 total savings for 1992 and 1993, and expected ongoing savings of at least $108,000 a year. Therefore, we will reduce CMP's deferred administrative expenses from $879,000 to $699,000 and allow CMP to recover $250,000 a year for ongoing administrative ELP expenses.

19. NOI #27 & RB #14. Special Income Taxes

The Company includes in this proposed adjustment several items which affect the calculation of current and deferred income tax expense and the associated deferred tax balances. The items included by CMP are:

1. elimination of the 10% State Income Tax Surcharge,

2. recognition of deferred taxes on tax timing differences, and

3. recovery of additional tax and interest amounts from tax years 1984 to 1987, deferred pursuant to the Stipulation accepted by the Commission in Docket No. 89-068.

The Docket No. 89-068 Stipulation allowed the Company to defer and seek later recovery of any additional taxes and interest paid when the IRS completed its examination of CMP's tax filings. Because these final tax determinations usually occur several years after the actual filing of the return, the Company received permission in the Docket No. 89-068 Stipulation to defer the amounts in order to allow the Company to be compensated should any of its positions (which CMP described as "aggressive") be overturned by the IRS. The Company claims that by taking such aggressive approaches (within legal limits), it is able to lower its income taxes, which is beneficial to ratepayers. Additionally, CMP states that it would be a cumbersome and tedious task to prove that each individual contested item provided a direct benefit to ratepayers.

The Advocate Staff accepts the first two items contained in the proposed adjustment, but recommends that the Commission disallow recovery of any amounts deferred by CMP under the 89-068 Stipulation terms. The Advocate Staff believes that CMP has not shown that ratepayers actually received any benefits from tax positions taken on the Company's returns. Further, the Stipulation did not guarantee recovery of any amounts, it merely allowed the Company to ask for recovery in a future case.

Because all amounts contained in CMP's proposed adjustment were recorded prior to the end of the test year, the OPA accepts the adjustment without comment.

While the Advocate Staff argument contains much merit, we find that CMP has presented sufficient reasons for allowing it to recover amounts related to "after-the-fact" tax adjustments made by the IRS. Ratepayers do get some benefits from CMP's tax positions, directly when included as part of test year revenue requirements, and indirectly by delaying the need for the Company to seek rate increases. CMP has no way of knowing what its ultimate tax liability might be when it files its tax return, so we find it reasonable for the Company to have some method for recovering the increased tax and interest amounts.

We will allow the Company to receive revenue requirement recognition for the increased tax amounts which it deferred pursuant to the 89-068 Stipulation. However, because this type of expense is likely to recur on a fairly regular basis (with the amounts being subject to wide variations) in the future, we will allow the amount to be included as a normalization item, rather than as a deferral and amortization. Because the Company was allowed to defer recovery of this type of expense, and because the proposed recovery period is approximately equal to the number of years of tax returns involved, we will increase CMP's revenue requirement by an amount equivalent to the impact of the deferred amount as though it continued in rate base. However, the deferral will not be included in rate base, nor will it be amortized to recoverable expenses. We will recognize the rate year rate base effect (as if the unamortized deferral were allowed in rates) as an addition to the Company's proposed adjustment. This return on the "asset" will be at the overall cost of capital adjusted for tax effects.

CMP's proposed revised Adjustment # 27 seeks to increase test year net operating income by $614,000. We will reduce that increase by $33,000 to account for the imputed recovery on the amount deferred.

20. NOI #28 & RB #15. Reacquired Debt and MTN Fees

In this adjustment CMP reflects the change in the amortization expense from test year to rate year of the costs associated with the reacquisition (i.e., retirement) of certain of its debt instruments, which were replaced by lower cost issues. In its final updated filing, CMP reflected the effects of its reacquisition of Series M and N of its mortgage bonds.

The Advocate Staff and OPA both accept the adjustment, except again, the OPA did not update its amounts to reflect those shown by CMP in its final filing.

We accept CMP's proposed adjustment for reacquired debt and MTN fees as shown on CMP 65.

21. NOI #29 & RB #16. Miscellaneous Adjustments

CMP proposes this adjustment in order to recognize the consequences of 9 relatively small items. Each of the individual amounts fell beneath CMP's self-declared $500,000 minimum threshold, but the items were apparently considered significant enough to include as a group. The items which CMP includes are:

1. amortization of Libbey buyout costs

2. removal of effect of obsolete inventory write-off

3. removal of completed Bates amortization

4. removal of completed Urban Forestry study amortization

5. removal of effects of 1992 earnings limit as imposed in Docket No. 90-085

6. elimination of 1991 hydro structural cost deferral

7. recognize amortization of management audit costs

8. adjust test year level of line clearance costs to ongoing level, and

9. removal of costs associated with selling former president's house.

Both the Advocate Staff and OPA accept the adjustments as proposed by CMP. However, both of them, as well as the Navy, recommend additional adjustments to CMP's test year results. We accept the 9 miscellaneous adjustments as proposed by CMP. We will address each of the proposed adjustments individually.

Line Clearance Costs

The Advocate Staff and the OPA both recommend a downward adjustment to line clearance costs due to the passage of L.D. 1041, which makes it easier for CMP to gain permission for trimming trees in the public ways. Both use the same $200,000 cost savings estimate provided by CMP. Apparently, CMP does not contest this adjustment, and we will recognize the estimated cost savings.

Costs of Selling Employees Former Residences

As shown above, CMP eliminated from the test year the cost of selling the former president's house. The Advocate Staff, the OPA and the Navy all recommend that all other test year costs related to selling of employee residences should be eliminated. CMP has supposedly discontinued its policy of purchasing and reselling the houses of transferred employees. We note that the OPA amount shown for this adjustment includes the entire test year expense. Apparently, OPA failed to notice that CMP removed the cost of the former president's residence from test year at Rebuttal. Although the amount is small (about $39,000 of expense) it is a proper adjustment and is included in our revenue requirement calculation.

Severance Payments

The Advocate Staff and the Navy recommend that all severance payments made to employees during the test year be eliminated, because the Company has not reflected any adjustment to eliminate additional positions during the test year. The amounts used by the Advocate Staff and Navy differ slightly, due to Navy's classification of some of the costs as capital. It is not clear why this would occur, so we accept the adjustment as proposed by the Advocate Staff.

Research and Development

Both the Advocate Staff and OPA call for elimination of all research and development spending outside of EPRI and EEI. The amounts used by the parties are slightly different. The OPA uses a higher amount based on a data response that seemed to describe the 1993 budget, not test year actual. The Advocate Staff and the OPA argue that R & D is a discretionary type of spending that should be cut back during tough economic times.

CMP states that cutting back on R & D would be short-sighted and counter-productive in the long run. Also, eliminating this spending could jeopardize some collaborative projects with EPRI. The Advocate Staff claims this is only a small amount of CMP's total. Further, CMP points out that NARUC has encouraged utilities to spend more on R & D to search for improved efficiencies on both the demand and the supply side.

While we recognize that R & D expenditures are discretionary, we will not make the adjustment proposed by the Advocate Staff and OPA. CMP's managers should make discretionary spending decisions. R & D spending can yield many long-term rewards, provided it is spent wisely.

Employee Incentive Programs

OPA calls for the elimination of all costs associated with the employee incentive program and with the non-union employee savings and investment plan, because of the difficult economic situation faced by CMP and its ratepayers. The poor job market should be incentive enough for people to do the work expected of them. Incentives are not needed. Further, OPA argues that the savings and investment plan is just an expensive perk that should be cancelled.

CMP responds that the incentive and savings programs are discretionary management tools that help the Company to hire and retain quality employees. Also, these items are only a piece of the overall compensation package, and the entire package must be examined before any disallowance can be made.

Here again, we will defer to management to determine the manner in which it chooses to spend a reasonable level of compensation dollars. CMP may well decide that, in order to meet the level of overall efficiency that we have decided, it must revise its approach to compensation. We will not, however, tell CMP precisely the manner in which it must achieve those efficiencies.

NOI #30 Depreciation

This adjustment was reserved by CMP, but not used.

NOI #31 Pole Attachment Revenue

CMP and the Advocate Staff address the issue in their attrition studies.

OPA does not discuss the issue in its Brief, but shows an adjustment to the Company's revenue requirement in its Net Operating Income Exhibit. The net operating income reduction of $211,000 first appeared in the surrebuttal testimony of Mr. Knudsen, but had no explanation with it.

We discuss the issue in our attrition analysis.

NOI #32 Federal Tax Rate Change

CMP used this adjustment to reflect the effect of the federal tax rate change on the test year unadjusted results. The Company calculated each individual adjustment at the new 35% rate. The Advocate Staff accepts the Company's proposed amount.

OPA accepted the adjustment, but again, the amount used was taken from CMP's rebuttal filing, not the Company's final proposal. The amount used by OPA was an estimate provided by CMP, which was refined after the close of hearings. We further note that each of OPA's individual adjustments was calculated at the old federal tax rate, so that a recalculation would be necessary if we were to accept any of OPA's proposed adjustments.

Additional Miscellaneous Adjustments

1. Normalize Uncollectible Expense

The Advocate Staff and the OPA both recommend that a 5-year average rate be used to adjust the Company's test year uncollectible expense amount. The Advocate Staff's adjustment uses a 5-year average of net write-offs to electric revenues, as shown by CMP in its response to 01-Staff-22, while the OPA bases its calculation on CMP's response to 12-Staff-44. The response relied on by OPA purports to show revenue and uncollectible expense. The revenue and expense amounts differ on the two data responses.

The Advocate Staff points out that averaging methods have been used in past cases to determine the uncollectible expense. CMP does not dispute that, but says the years used by the Advocate Staff and OPA are not appropriate, because future years are likely to be significantly different.

We will accept the 5-year averaging method recommended by the Advocate Staff. We have no reason to doubt the validity of the use of an average, and CMP has provided no evidence as to why the years used by the Advocate Staff and the OPA are inappropriate for projecting the future. We are somewhat disturbed that CMP would provide what appear to be inconsistent responses to similar requests for information. At a minimum, CMP should fully explain the source of the numbers. The revenue from 01-Staff-22 seems to equal that shown on CMP's 1992 FERC form 1, while the uncollectible expense from the FERC report ties to that shown in 12-Staff-44. In any event, we will use the uncollectible expense adjustment as proposed by the Advocate Staff.

2. EEI Public Relations & Miscellaneous Advertising

The Advocate Staff recommends that a small additional amount of the Company's EEI dues be disallowed as promotional advertising. The Company has already recorded 25% of its EEI dues below the line, but the Advocate Staff believes an additional 6% should also receive below-the-line treatment. Navy also recommends this adjustment. The expense amount is about $25,000.

Even though the amount is small, all public relations types of expenses should not be recovered from ratepayers, and we accept the Advocate Staff adjustment.

The Advocate Staff and Navy also recommend that approximately $28,000 of the Company's own advertising expenses should be recorded below the line, because the items were of an institutional nature.

CMP does not deny the assertion, but did not make the adjustment of the small amount involved. As with the EEI public relations expense, we will accept the adjustment in spite of the small dollar value.

3. EEI & EPRI Dues

As a cost containment measure, OPA recommends that CMP's EPRI and EEI dues be disallowed completely. The total amount of expense is about $2.4 million. OPA argues that customers are struggling, as CMP was during the Seabrook era, and should not have to pay for EPRI and EEI performed research.

CMP responds that membership in EEI and EPRI provides valuable information, products and service to the Company, which in turn can be used to benefit ratepayers. Discontinuing membership would be short-sighted, as much research would be lost.

While we agree that CMP should be taking all reasonable measures to control its costs, we will not disallow the costs of EPRI and EEI dues. While membership has, at times, been suspended in the past, the Company has justified its decision to remain a member of these organizations. This is one more example of a discretionary expense which we will not tell the Company to abandon. Rather, we expect the Company officers to exercise their judgment after weighing the costs and benefits.

4. Disaster Recovery Plan

OPA recommends that the test year spending on the disaster recovery plan be eliminated as a non-recurring expense. CMP says the magnitude is relatively small, and other ongoing projects will be undertaken by the same group of employees during the rate year.

The Company's claim that other ongoing projects will occur during the rate year seems plausible to us, and we decline to make the OPA proposed adjustment.

5. Nuclear Outage Normalization

OPA recommends that refueling outage costs at CMP's nuclear plants other than Maine Yankee should be tracked and normalized as is done at MY. OPA claims that this would save about $350,000 in expenses.

CMP says that outage costs are not tracked separately at the other nuclear plants in which it has a part ownership. Because of CMP's small share in the plants, it doubts it could convince the other owners to incur the additional expense involved. Also, a type of normalization occurs anyway, because the plants tend to have shutdowns at various times. Finally, CMP argues that OPA has incorrectly calculated the proposed adjustment, and if it were properly calculated, the adjustment would result in an increase to expense.

We will not adopt this adjustment.

6. Amortizations

OPA believes that CMP has reduced its commitment to DSM, which was one of the key parts to the Seabrook settlement in Docket No. 84-120. In response the Commission should lengthen the recovery period for the remaining amortizations by 5 years, so that full recovery would not occur until June 7, 2000. According to the OPA calculations, this modification would increase CMP's net operating income by $1.692 million and increase rate base by the same amount.

We share the OPA's concern about the Company's commitment to DSM programs. However, we have encouraged the Company to spend its money cost effectively, and the recent decline in avoided costs suggests that the Company is following a reasonable course with regard to DSM. OPA has not convinced us that CMP has reduced its commitment to cost-effective DSM. Further, on a present value basis spreading out recovery should be about equal to keeping the current amortization schedule. We therefore decline to make the OPA proposed adjustment.

7. Low Level Radioactive Waste

OPA argues that CMP's share of Maine Yankee's expense for low level radioactive waste ("LLRW") should be disallowed, because the future costs are uncertain. OPA argues that the Texas compact has many uncertainties before it becomes effective, and MY's future costs are speculative.

Since the time of the OPA Brief, voters in Maine have approved the agreement with Texas to send Maine's LLRW there. This is only the first step in the process, but it is a significant one. Further, if the compact had been rejected, MY still needs a place to send its LLRW. It seems reasonably certain that there will be some future expenses associated with this problem. While we decline the OPA proposed adjustment, we will further address the issue in the attrition analysis, which is where the Advocate Staff and CMP have discussed it.

8. Retired VP of Human Resources

The Navy recommends that an adjustment be made to recognize the fact that the Company's VP of Human Resources retired during the test year, and there are no plans to refill the position. The amount of expense for the test year is about $49,000.

CMP says that the amount is small. While that is correct, we will adopt the adjustment as proposed by the Navy.

9. Personal use of Company Cars by CMP Executives and Board of Directors Pension Plan

Navy argues that the costs incurred by CMP for the personal use of Company cars should be disallowed, because it is an expensive perk that should be eliminated as an unnecessary expense. The test year expense was about $62,500.

Navy also recommends that the expenses incurred to provide pension plans for members of the Board of Directors should be disallowed, because the Board serves the interest of shareholders, and the members are likely to have sufficient pension coverage from their primary employer. The test year amount of expense was about $44,000.

Again, we believe it is a matter of Company discretion as to how it compensates it officers and board members, and we must look at the entire compensation package provided in order to determine its reasonableness. The only evidence we have concerning officer and board member compensation comes from the management audit, which indicates that, in general, both officers and board members are reasonably compensated when compared to their peers at other utilities. Thus, we decline to adopt the compensation adjustments as proposed by Navy.

10. Millstone III Decommissioning

By Order in Docket No. 90-012-03, dated August 1, 1991, the Department of Public Utility Control of the State of Connecticut, acting pursuant to Connecticut law (the Decommissioning Financing Act of 1983,) established the costs of decommissioning Millstone III to be $332,506,254 (in 1991 dollars.) CMP, as a 2.5% owner, is responsible for $8,312,656. Pursuant to that same August 1 Order, CMP is required under Connecticut law to make monthly payments to the Millstone III decommissioning fund of $18,497 or an annual amount of $221,964.

We find that the cost of decommissioning and the resulting decommissioning funding required by the proper Connecticut authority is a reasonable expense for ratemaking purposes. As the $221,964 was paid during the test year and no adjustment has been made to that expense, the Millstone III decommissioning expense is therefore included in CMP's rates that we set today. Finally, we accept the after tax rate of return of 6.5% for the Millstone III decommissioning fund set by the Connecticut DPUC is reasonable, because that rate of return is approximately equal to the decommissioning escalation.

D. Conclusion: Adjusted Test Year Results

Having examined each of the individual adjustments to the test year as proposed by any of the parties, we find that the adjusted test year results indicate that CMP requires a retail revenue increase. The details of that analysis our shown on Order Exhibits 1-13.

The adjusted test year now becomes the starting point for our attrition analysis which follows.

VII. ATTRITION ADJUSTMENTS ANALYSIS

In this section we examine each of the areas of the attrition analysis as presented by the parties. We have previously discussed our overall perspective on attrition (at VI.B.). We now will look at the details of the issue.

Sales Forecast

CMP's short-term forecast of total kwh sales (February 1993 Update) is developed as a sum of six separate forecasts done for distinct customer classes (not rate classes). These customer classes and the forecast results for 1993, 1994 (the rate year), and 1995 are given in our table FORECAST RESULTS (below). The Industrial class is divided into "Paper" and "All Other" categories, and separate forecasts are done for each.

CMP develops a number of incidental forecasts as well, for use as inputs in its customer class forecasts, or for other purposes in its rate case. These include customer forecasts, a price forecast, a heating degree day forecast, a primary electric space heating saturation ratio forecast, and also a rate class sales forecast for use in the attrition analysis (found in Dumais's Attrition testimony).

Most of these forecasts use econometric regression models, a few use other statistical techniques, and the Paper Industry forecast uses specific information about past and expected sales, equipment changes, and similar information provided to CMP by every customer in that class.

CMP considers the Maine economy to be the principal driver of its sales. Its econometric models typically include such economic variables as Maine per capita income, US gross domestic product, and Maine employment in various categories. Price, heating degree days, and various other variables are also used where appropriate.

A simplified typical procedure for econometric forecasts, similar to the one used by CMP, would be as follows:

1. Develop an equation expressing the forecast variable (kwh sales) as a function of a number of explanatory variables. The explanatory variables selected should be known to be related to the forecast variable on the basis of economics or some other relevant theory.

2. Obtain historical data giving values of the forecast and explanatory variables (usually on a quarterly basis).

3. Calculate coefficients that enable the equation to best produce values of the forecast variable as a function of values of the explanatory variables.

4. Obtain independently forecasted values of the explanatory variables for the forecast period (say, 1994), insert these into the equation, and calculate the value for the forecast variable.

CMP obtains historical and forecasted values for its explanatory variables, and historical values for its forecast variable, from a variety of sources. These include its own records, DRI, Inc. (an economic information service), and NOAA weather data.

An interesting feature of CMP's forecast methodology is its treatment of kwh savings due to DSM. CMP keeps records in its Chapter 380 Quarterly Reports of estimated kwh savings due to its DSM programs. In developing a sales forecast it adds accumulated DSM kwh savings to actual kwh sales, and then forecasts a kwh number that represents sales plus cumulative DSM savings. It then subtracts expected accumulated DSM kwh savings from the forecasted kwh number, to obtain its forecast of actual sales. Because the scale and character of CMP's DSM programs may vary widely from year to year, with corresponding variations in achieved load reductions, this procedure allows the forecast to reflect the DSM component of both historic and projected loads. It should be noted that the expected accumulated DSM savings subtracted out at the last stage of this procedure to obtain the forecast of actual sales consists of accumulated historical DSM savings plus CMP's planned DSM program savings for the upcoming forecast period. The accuracy of the sales forecast thus depends on whether DSM programs are implemented as planned.

FORECAST RESULTS (MWH)
(with annual % change)

Customer Class	1992 (Actual)	1993	1994	1995
Residential	2,989,402	2,968,769 -0.7%	2,965,078 -0.1%	2,931,407 -1.1%
Commercial	2,365,896	2,411,283 +1.9%	2,432,886 +0.9%	2,508,288 +3.1%
Industrial (Total)	3,672,098	3,702,296 +0.8%	3,819,201 +3.2%	3,846,008 +0.7%
Paper	2,440,858	2,444,504 +0.1%	2,529,547 +3.5%	2,535,487 +0.2%
All Other	1,231,240	1,257,792 +2.2%	1,289,654 +2.5%	1,310,521 +1.6%
Lighting	35,581	35,112 -1.3%	34,419 -2.0%	33,594 -2.4%
Wholesale	118,678	121,515 +2.4%	124,983 +2.9%	127,748 +2.2%
TOTAL	9,181,655	9,238,975 +0.6%	9,376,567 +1.5%	9,447,045 +0.8%

CMP's Direct Testimony

CMP presented its sales forecast, described above, in its March 1, 1993, prefiled testimony of Laurie Lachance. Mrs. Lachance provides extensive documentation of CMP's forecast methodology, inputs, and results. She also supplements her testimony with a discussion of the Maine and US economies. She also discusses three forecast issues raised by the Commission in its Order in CMP's last rate case, Docket No. 90-076. These issues concern how heating degree days for the forecast period are to be forecast; what to use as a price of electricity input variable for the forecast period when the size of the rate increase for that period has yet to be decided (CMP proposed using 60% of the requested increase); and how kwh savings from DSM are handled in the forecast (CMP's proposal is described above in our Overview). These issues will be discussed briefly below.

Staff's Direct Testimony

The Advocate Staff presented testimony on the economic outlook by Dr. James Breece, a Maine economist, and by Dr. John Stutz on CMP's forecast. Breece expressed cautious optimism about the Maine economy, at the same time stressing the unusually many uncertainties it faces. He examined CMP's economic inputs and made a number of recommendations, including the development of high and low case scenarios to study forecast uncertainty. In general, Dr. Breece characterized CMP's approach as "fine." He stated that economic trends may be more favorable than those reflected in CMP's input data and recommended updating the forecast with more current input data.

Dr. Stutz also characterized CMP's equations and general approach to forecasting as reasonable, at the same time providing a number of criticisms concerning detail. He argued for a number of upward adjustments, which taken together increase the forecast by 38,000 mwh and increase attrition year revenue by about $2 million. (It is our understanding, based on Dr. Stutz' Surrebuttal Testimony and Staff's Brief, that the Advocate Staff is no longer requesting these adjustments. Therefore we will not discuss them in detail here.) Dr. Stutz recommended that 55%, rather than 60%, of the requested rate increase be used for the forecast and expressed general approval of CMP's handling of kwh savings due to DSM. He also argued that CMP's electric heat saturation variable assumed too precipitous a decline. Like Dr. Breece, he recommends updating the forecast.

CMP's Rebuttal Testimony

CMP did obtain updated economic data and used these to calculate impacts of the changes on sales and revenues. CMP found these to be small and offsetting, amounting to a net revenue effect of only -$425,000. Because the changes are small, and in order to reduce confusion, CMP did not update its forecast. CMP believes that its original forecast, submitted with its Direct Testimony, remains the best and recommends that the Commission adopt it. (An updated forecast, if adopted by the Commission, would increase CMP's revenue requirement by $425,000.) CMP prepared a table comparing old and new economic data, which shows that most values did not change very much and that the upturn in the Maine economy anticipated by the Advocate Staff's witnesses did not materialize.

As suggested by Dr. Breece, CMP developed low and high growth scenarios to study forecast uncertainty. Using the forecast as a base case, the low growth scenario results in a $36 million revenue loss. The high growth case results in a $10 million revenue gain.

CMP pointed out that its planned DSM for 1993 and 1994 had decreased overall. If these changes were incorporated into the forecast (they were not), estimated sales would therefore increase and the Company's revenue requirement would decrease by $1.8 million. (This amount is not included in the $425,000 effect mentioned above.)

CMP presented data from its recently completed 1993 Residential Energy Survey (and earlier surveys) attempting to measure fuel conversion among residential space and hot water heating customers. This data showed a primary electric heat saturation rate of 7% as of January, 1993. This figure is lower than that assumed in the forecast, which counters Dr. Stutz' claim that the forecast assumes too precipitous a decline in primary electric heat customers. The Survey also showed losses of hot water heat customers.

CMP also presented a comparison of forecasted and actual sales for the first six months of 1993. Residential sales were 3.8% less than forecasted, Commercial sales 3.5% less than forecasted, Paper Industry Sales 2.3% greater than forecasted, and All Other Industry sales .4% less than forecasted. Total sales were 1.7% less than forecasted. CMP explained that actual sales should be adjusted upwards by .8%, to account for fewer than normal meter reading days.

CMP claimed that the forecast errors in the Industrial classes can be explained by temporary unusual behavior of one customer in each class. The Company said that its models could not explain overforecasting in the Residential and Commercial classes (other than .8% due to fewer days). It attributes the error to loss of space and water heating load in both classes that its models do not capture.

CMP's general position is that its sales in the rate year will not reach forecasted levels and that revenue projections are therefore overstated. The risk of forecast error is almost entirely downside in CMP's view. In fact, as we discussed earlier, in his surrebuttal testimony, Dr. Silkman found the CMP low growth scenario as overstated, and further adjusted for lower sales to come up with his likely scenario.

Staff's Surrebuttal Testimony

Dr. Breece updated his testimony on the Maine economy, pointing out that in fact it had weakened since the time he prepared his direct testimony. He continues to hold that the Maine economy tracks the national economy, which is growing, though more slowly than expected. Therefore he remains cautiously optimistic about the Maine economy.

Based on CMP's Rebuttal testimony, especially its updated inputs and data concerning forecast error for the first half of 1993, Dr. Stutz changes his position on the CMP forecast. The difference between forecasted and actual sales are significant and lead to strong reservations about CMP's data and about the ability of its models to explain actual sales. "Indeed, we now lack reliable estimates of the most fundamental data, such as the number of year-round residential customers in 1993." He sees no basis for CMP's approach to attrition (to be discussed below), which depends on the claim that its forecast is unlikely to be exceeded. If the Commission does adopt CMP's forecast it should increase it by the amount of CMP's planned reduction in DSM.

Dr. Stutz claims that the "inputs to the CMP forecast have changed in every area." In particular, he raises questions about the revised productivity index (used for the All Other Industrial class forecast). The "revised data" is very different and shows a decline during 1993 and 1994 that does not appear in the original. This decline is implausible, because Maine productivity growth would be expected to track growth in US GDP. DRI's explanation of its new productivity index (38-Staff-21) is unsatisfactory.

He also criticizes CMP's 1993 Residential Energy Survey. Its data show implausible changes in the numbers of different types of customer. The difficulties lie in sampling problems, caused by the use of "systematic sampling" and by non-response bias. The Surveys are the source of CMP's data on loss of space and water heating load, which underlie the Company's explanation of why its sales are less than forecast. The Surveys are "at best suspect and likely unreliable."

Dr. Stutz finds CMP's scenario analysis to be speculative and of little real value. It shares all of the weaknesses of CMP's models and makes assumptions that are arbitrary and asymmetrical between high and low cases.

The Advocate Staff reviews the econometric standards articulated by the Commission in CMP's last rate case (Docket No. 90-076) and in the Examiners Report in Docket No. 90-010 (the last BHE rate case). The Advocate Staff asserts that CMP's forecast fails on at least the first 90-010 standard, the reasonableness of the economic theory underlying the model. In large part this conclusion is driven by the differences between forecasted and actual sales for the first six months of 1993 (87).

Also important is the "high level of uncertainty inherent in any econometric forecast," which blossomed during the proceeding, "essentially swallowing whole the Company's forecasting efforts."

The Advocate Staff presents Table B, describing the differences between CMP's forecast and actual sales year to date.

TABLE B

CLASS	**ACTUAL**	**FORECAST**	**DIFFERENCE**	**ERROR**
Residential	-4.6%	-0.8%	-3.8%	-82.6%
Commercial	-0.7%	2.8%	-3.5%	-500.0%
Paper Industry	3.6%	1.3%	2.3%	63.9%
All Other Industrial	1.1%	1.5%	-0.4%	-36.4%
TOTAL SALES	-0.7%	1.0%	-1.7%	-242.8%

This Table is based on a similar table in CMP's Rebuttal Testimony, except that the Advocate Staff adds the last column, which is intended to bring out the size of CMP's forecast errors. Since the model is intended to be causal, its failure to forecast accurately indicates specification error in the model's variables. Specification error here is failure to correctly model the causes of CMP's sales. This indicates that the model cannot be based on reasonable underlying economic theory, and thus fails to meet one of the Commission's econometric standards.

The Advocate Staff also criticizes CMP's reliance on the findings of its 1993 Residential Survey. This Survey is "fundamentally flawed," because CMP does not have "direct information" on space and water heating saturation, but instead estimated it from its Surveys, which are plagued by sampling problems. First, the sample is not random, because it sampled only every nth customer ("systematic sampling"). Second, the sample is not geographically representative. Third, there may be serious non-response bias. Finally, "the logic behind that sampling method is incomprehensible." The Advocate Staff points out problems over the changes in the numbers of certain types of customers reported in the Surveys. The Survey is so flawed, the Advocate Staff argues, that "no calculations that are based on its results can be relied on." The Advocate Staff also points out that CMP has no data which support its hypothesis of loss of heating load in the Commercial class.

Concerning CMP's scenario analysis, the Advocate Staff believes that the $36 million downside variation and the $10 million upside variation understate the uncertainty in the forecast.

In discussing confidence intervals as a measure of forecast uncertainty, the Advocate Staff argues that a confidence interval for Total Sales should incorporate confidence intervals for all the individual rate class forecasts. When this is done the interval is +/- 8.3%. It should also incorporate "error variance" for the ten or more independent variables. This increases the interval by a factor (conservatively) of 1.4. The resulting "true confidence interval" is +/- 11.6%.

The Advocate Staff recommends that the Commission completely reject CMP's sales forecast, at least as a necessary tool in an attrition adjustment. No attrition award should be based on such an unreliable forecast. The forecast is just too uncertain, judged by its failure to track sales year to date. In the alternative, the Advocate Staff urges the Commission to incorporate into the forecast CMP's reduced DSM, as recommended by Dr. Stutz. The OPA supports the Advocate Staff's position on the forecast.

CMP's Brief

In its brief, CMP emphasizes its claim that it is unlikely to attain forecasted sales levels during the rate year. The Company asserts that the Advocate Staff and OPA have been unable to refute this. It points out that Dr. Stutz admitted that shortfalls in 1993 will impact 1994. The scenario analysis shows that downside forecast error is four times as likely as upside error. CMP asserts that it has convincingly shown that its forecast will not be exceeded and can therefore reasonably be used to determine an attrition allowance.

Analysis

The Advocate Staff's critique of CMP's forecast centers on its failure to predict sales accurately during the first six months of 1993. We will first ask how serious are these errors? One way to gauge this would be to examine CMP's history of forecast errors. Exhibit Lachance 2 gives the following 15 year history. (The error shown is the difference between the total sales forecasted in the Fall of the previous year and the sales actually achieved.)

YEAR	ERROR
1978	+0.4%
1979	+2.1%
1980	+3.1%
1981	-0.9%
1982	-0.7%
1983	-4.3%
1984	-3.2%
1985	+1.0%
1986	-1.5%
1987	0.0%
1988	-1.3%
1989	+1.3%
1990	+0.8%
1991	+0.8%
1992	+2.2%

CMP claims to have explained the errors in its Industrial class forecasts, as well as .8% of the overforecast for the Residential and Commercial classes. This leaves an unexplained error of -3.0% in the Residential forecast and -2.7% in the Commercial class. (The Advocate Staff does not acknowledge explained error in its discussion of its Table B.)

CMP's forecast errors range from zero to 4.3% in magnitude, with 1.6% as average magnitude of error. Average error, taking sign into account, is zero for the 15-year period. The forecast adopted by this Commission for 1991 in CMP's last rate case was 9.713 billion mwh. Actual sales were 9.175, for an error +6.7%. CMP's largest error in fifteen years was far smaller.

Given this perspective, unexplained errors of 3.0% and 2.7%, while larger than the average of 1.6%, are probably within the range of the normal for CMP electricity sales forecasts. They certainly do not indicate anything grossly amiss.

Another approach to gauging the magnitude of these errors is to compare them to the confidence intervals for the forecast. CMP's response to ODR-023 provides data that can be used to construct these intervals. Table 6 (first page) shows the lower bound of a 95% interval for 1993 residential sales as 2,821,907. Table 6 (second page) shows the upper bound as 3,123,631. The residential forecast for 1993 is 2,968,769. This amounts to a +5.2% upper bound and a -4.9% lower bound. (Asymmetry is due to the log form of the forecast variable.) A similar procedure for commercial sales leads to a +5.4% upper bound and a -6.8% lower bound. Errors of 3.0% and 2.7% are well within these 95% confidence intervals. From this perspective they do not seem extreme, and in fact are not even statistically significant at this confidence level. The Advocate Staff's "true" confidence intervals would be larger by a factor of 1.4. The more success the Advocate Staff has in increasing forecast uncertainty by widening confidence intervals, the weaker its argument becomes that these errors show that CMP's model has broken down.

The Advocate Staff argues that the errors in CMP's forecast show that it has broken down, fails to model the causes of CMP's sales, and cannot be relied on for any purposes. CMP, on the other hand, thinks that the errors can be explained by loss of sales to space and water heating customers in the residential and commercial classes.

The Company's forecast history, shown above, displays a trend of overforecasting 1989-1992, with a fairly large overforecast in 1992. The Company has been concerned about loss of heating load for several years, and has attempted to partially account for it in its current forecast by adding an electric heating saturation variable. It is also developing Residential Survey tools for measuring loss of space and water heating load in the residential class. It has data which support the hypothesis of loss of water heating load in this class. It has not yet developed survey instruments to measure this phenomenon in the Commercial class. The hypothesis that it is occurring, however, is supported by many letters and the testimony of Commercial customers in this case, as well as by both common sense and economic theory. CMP should attempt to measure and model loss of heating load in both classes, as well as attempt to capture price sensitivity of other kinds and in all classes.

CMP's forecasting methodology has evolved over a period of years in response to criticism from this Commission, to suggestions from many expert consultants, and in response to the Company's own insights and analytical needs. Its forecast history, shown above, displays a trend towards improved accuracy, and the accuracy of recent forecasts shows that the Company's models have performed adequately in representing the economic forces at work in its markets. Such things do not change entirely overnight.

It is wrong to conclude that because the forecast has not been entirely accurate, keeping in mind what we have said about the size of these errors, that the model has broken down entirely. There is a more reasonable explanation, with much support in this record. Besides the causes that CMP has been modelling with some success, there are new forces at work in its market which its models do not capture, at least not yet. The effects of long term price elasticity manifest themselves in loss of load. It is commonly held that short-term price elasticity is low for electricity. In the longer term, customers have the opportunity to take note of the alternatives and change their appliance stock. Five years of price increases is a long enough period for such adjustments to be made, such as loss of heating load, not to mention potential loss of large customers.

CMP, as it knows and is beginning to do, will have to measure and model these manifestations of long-term price elasticity to restore the accuracy of its forecasting. This will involve adding to and refining the existing models in an evolutionary process.

CMP has argued that because its models do not capture loss of load they will almost certainly overforecast for the rate year. An attrition allowance based on this forecast, according to CMP, will understate the amount of attrition. The Advocate Staff believes that CMP's forecast is too unreliable to be used at all for attrition. The issue is really whether forecast errors using CMP's model will be random (the Advocate Staff's position), or whether they will be systematically biased (CMP's position). We conclude, based on the above analysis of the status of CMP's models and recognizing that this involves some exercise of judgment, that it is substantially more likely that CMP's current models have a systematic bias towards a higher forecast than that their forecasts will be random with respect to actual sales. They will not forecast accurately, but they can still function as a guide. Like a compass which points to magnetic north as guide to true north (in Maine the difference is 17 degrees, almost 10% of the largest possible error), a biased forecast instrument can be useful. In this instance, it is reasonably safe to assume that CMP's forecast for 1994 will not be exceeded by actual sales.

The appropriate standards for econometric forecasts in attrition are the recognized professional standards for econometrics in general. We have begun to articulate these in the Order for Docket No. 90-076 and in the Examiners Report for Docket No. 90-010. These include: plausible theoretical bases for suggested linkages; a model that satisfies professional standards of statistical inference; reasonableness of underlying economic theory; effective use of econometric methods and tests; and the proficiency and objectivity of the forecaster.

We believe that CMP's forecast meets these standards. The linkages among its variables are plausible theoretically, and it meets recognized standards of inference. These standards are such things as good R^2s, good t statistics, acceptable diagnostics, use of quality inputs such as DRI's, and so on. When the Advocate Staff's witnesses in their direct testimony expressed general approval of CMP's approach they were acknowledging that CMP's models and its use of them meet these standards. However, a model that has captured the causes can falter if a new causal force occurs. The remedy is to look for new explanatory variables.

Certain comments on Dr. Stutz's surrebuttal testimony are warranted. He states that CMP lacks reliable estimates of the most fundamental data, including the number of year-round customers, and that CMP's inputs have changed in every area. In fact CMP's inputs have not changed at all. Its recommendation was that the Commission adopt the Company's forecast as filed in the direct case, before any updated variables were available. CMP's revised DSM plans are the only change of which we are aware. Concerns about the reliability of the updated inputs are not relevant to the old forecast. They are perhaps exaggerated as well. Year-round customers is not a forecast variable at all. Dr. Stutz is correct that there are some problems with this number, as will be discussed below. Of the others, Dr. Stutz questions only two, the new productivity index and the electric heat saturation index. (To the extent that it depends on the Surveys, it appears that CMP did not update this variable).

Dr. Stutz notes that values of the new productivity index are quite different from the old index. In addition, it shows a decline in 1993 and 1994 that does not appear in the old index. The Advocate Staff finds these differences problematic and anomalous. The change in productivity index is discussed in CMP's response to 38-Staff-21, which is a DRI document explaining methodology. DRI has rebased its regional indices from 1973 to 1987, and has also made some other "minor methodological refinements," all in order to make its regional indices more consistent with its national indices. The index in question is used as an independent variable in the All Other Industrial class forecast. It is constructed by dividing a Maine State Industrial Production Index (with SIC 26 - paper - removed) by Maine Total Manufacturing Employment (with SIC 26 removed). When CMP introduced the new index as an update from DRI, the Company in effect changed this independent variable. The All Other class forecast should not be updated using the new index when the model's coefficients were estimated using the old index. Either an update of the old index should be used to update the forecast, or a new model should be estimated using historical values of the new index. In its next forecast CMP should attend to any inconsistencies or confusion caused by the change in this independent variable.

In Lachance's rebuttal testimony, CMP displays the revenue impacts of updating various variables. If the impact of the productivity index change were removed (because the computation is mistaken in principle, as just discussed) the net revenue difference between the original and updated forecasts is reduced to only $85,000 (from $425,000). Since an update of the old index would very likely have been close to the original value of the old index (rather than very different, as was the new index), it is likely that a properly calculated net impact would be close to $85,000. All told, this provides several reasons for staying with the original forecast.

Concerning the electric heat saturation variable, Dr. Stutz argued that CMP assumed too precipitous a defection of electric heat customers. Ms. Lachance argued that based on a 7% saturation ratio as of January, 1993, discovered in the Company's 1993 Residential Energy Survey, CMP's assumed rate of defection was actually too slow. The Advocate Staff made many criticisms of the Survey, generally focusing on sampling problems, which became evident when the number of year-round customers reported in Table One of Lachance Ex. 10 was examined. (These number were 357,881 for the 1989 Survey, 418,385 for 1992, and 346,565 for the 1993 Survey.)

In its response to 38-Staff-29, CMP explains that the 1992 number is probably too high, because its sample of year round customers was obtained in a manner that overstated their proportion in the entire population. Therefore the numbers of customers in various categories in Table One from year to year cannot be compared. CMP believes, however, that the samples of year-round customers are representative, so that percentages such as for Primary Electric Heat, are statistically valid. The 7% number in question is one of these. On its face, this account seems adequate.

The Advocate Staff raises many other objections to the sampling methodology of CMP's Surveys. First, the sample is not random, or may be biased, because of the use of "every nth" systematic sampling. Second, the sample is not geographically representative. Third, there may be non-response bias. Fourth, the methodology's logic is "incomprehensible." It is also claimed that the confidence interval for the electric heat saturation ratio is large (+/-8.1%), and that the Surveys are so flawed that no calculations based on them can be relied on.

We will comment on these arguments. First, we believe that systematic sampling can be acceptable. The difficulties with systematic sampling which can cause bias occur when patterns are built into the data because of some peculiarity of how the individuals were numbered. We have no indication of such a pattern here. Second and third, geographic representativeness and non-response bias are legitimate concerns, although there is probably no way of determining from this record how serious any resulting problems may be. Fourth, characterizing CMP's responses to data requests as "incomprehensible" seems exaggerated. Concerning the confidence interval for electric heat saturation (the 7% number that figures in CMP's defense of its forecast assumptions), since CMP knew from earlier surveys about what this percentage would be, it could correctly have used .1 and .9 as values of P and Q, rather than .5 and .5, to compute the interval (38-Staff-39). This would have decreased the interval by a factor of .09/.25, or .36. It could also have further reduced the interval by choosing a lower confidence level. Despite the flaws in the Surveys, it remains possible that some numbers in them are reliable. Nevertheless, the Surveys clearly have sampling problems. CMP should revisit them in the light of the Advocate Staff's criticisms to determine what findings must be abandoned or qualified, as well as what can stand. (It seems possible that the 7% electric heat saturation ratio would stand.)

Concerning CMP's scenario analyses, we believe that Dr. Stutz is correct in pointing out that these results share any flaws in CMP's models, and that the rationales for the scenario assumptions are unclear or arbitrary. Dr. Silkman's alternative scenario appears to be much better in this regard, since his assumptions actually correct some of the defects in CMP's model, as recognized by the Company. These defects are failure to model price sensitivity and loss of load, and assuming the loss of only one large customer. We are unsure whether the Advocate Staff's claim that the scenarios understate forecast uncertainty is correct. In some ways they clarify the nature and financial magnitude of the downside risk of forecast error. We consider the scenarios to be useful. In the future an attempt should be made to provide a better foundation for their assumptions. (Incidentally, we point out that CMP's argument in its Brief that the scenarios show that overforecasting is four times as likely as underforecasting is mistaken. It confuses financial magnitude of the risks with probability of occurrence. There is no information about probability in the scenario analyses.)

Turning to three forecasting issues raised in our Order in Docket No. 90-076, we find that CMP's procedure for forecasting HDDs, making use of a 15-year moving average, is reasonable and based on an appropriate study. We agree with Dr. Stutz that CMP's treatment of kwh savings due to DSM is reasonable. Consistent application of this methodology, however, requires that CMP adjust its recommended forecast to reflect its revised planned DSM activity for 1993 and 1994. We have performed this revision in the table below (based on our Forecast Results table, above, and Lachance Ex. 15). Concerning the method for forecasting price of electricity, we know of no good solution at this time. It is very difficult to predict what part of a rate increase request will be granted, and recent averages may be a particularly poor predictor. Dr. Stutz recommends 55%, based on a "broader historical consideration." This may have some merit. CMP has used 60% in developing its forecast. It would have been better if CMP had used 57%, as calculated in Lachance Ex. 5. Based on the price sensitivity analyses in Lachance Ex. 12, we conclude that the revenue impacts of these differences are negligible. In the interests of administrative efficiency CMP's use of 60% may stand.

FORECAST RESULTS (MWH), with annual percentage change.
(with adjustment for reduced DSM)

Customer Class	1992 (Actual)	1993	1994
Residential	2,989,402	2,966,032 -0.8%	2,963,650 -0.1%
Commercial	2,365,896	2,425,132 +2.5%	2,460,926 +1.5%
Industrial (Total)	3,672,098	3,699,423 +0.7%	3,821,988 +3.3%
Paper	2,440,858	2,444,504 +0.1%	2,529,547 +3.5%
All Other	1,231,240	1,254,919 +1.9%	1,292,441 +3.0%
Lighting	35,581	35,112 -1.3%	34,419 -2.0%
Wholesale	118,678	121,515 +2.4%	124,983 +2.9%
TOTAL	9,181,655	9,247,214 +0.7%	9,405,966 +1.7%

A. Pole Rental Revenue

The expected amount of pole attachment revenue for the rate year is subject to dispute between the Advocate Staff and CMP. CMP employs a trended growth rate of 6% which it says reflects the anticipated growth in number of attachments and in rental rates. The Advocate Staff uses a growth rate of 8%, which represents the average trend rate from 1988 through 1992. Neither party attempted to include the expected effects of the recently completed Pole Attachment Rule (Chapter 880) in its projections because they claimed the final rule was published too late for them to analyze.

Ideally, the projection of pole rental revenues would have taken into account the effects of the new rule. Because no one has done so in this proceeding, we will use the Advocate Staff's projected level, as it is based on known historic trends, rather than rely on untested assumptions.

B. Purchased Power Capacity

The vast majority of this expense is related to the Yankee nuclear units, with Maine Yankee being the largest component. CMP used the latest MY forecast as its rate year projected amount. In order to reflect normalization of outage costs, CMP uses the MY forecast of the 1995 outage costs. Because the 19-month period for normalizing the 1993 costs will end in February 1994, Mr. Dumais used 10 months of the projected 1995 costs along with the 2 months of the 1993 costs in order to arrive at his total rate year projection. The Company originally proposed to shorten the amortization period to 18 months, but after reconsideration, decided that 19 months was more representative of the time between outages. For its share of low level waste disposal ("LLWD") costs, CMP used the 1993 budget increased by 5.5% (3% inflation, plus 2.5% real growth). The combination of these projections produced an annualized MY growth rate of 8.3%, which, when combined with other Yankee unit projections, results in an overall purchased power growth rate of 6.6% per year.

The Advocate Staff witness Catlin proposed several adjustments to the MY projections, but accepted those for the other Yankee units. First, Mr. Catlin used only the costs of the 1993 outage in his normalization calculation based on his belief that these costs are the best estimate of what the next outage will cost and also because the amortization period of the 1993 outage should continue through the time of completion of the 1995 outage. In addition, Catlin reduced CMP's projection for low level waste disposal fees by estimating CMP's share of these costs at $21 million and assuming that MY would seek recovery over the remaining life of its license, which runs through 2008. This results in an annual charge of about $1.5 million. Finally, Mr. Catlin estimated non-outage related expenses by using a 2.5% real growth rate (5.5% nominal growth with inflation considered), but assuming a 3.3% budget underspending, as occurred in 1992. Finally, as in the Advocate Staff's test year analysis, the costs of the MYEIC are removed from the total expense level.

We believe the Advocate Staff's estimate of the non-outage related costs is a more realistic forecast, given MY's history of underspending its own budgets. Also, the Advocate Staff projection of the LLWD costs seems to based on a reasonable assumption regarding the expected future costs for disposal. Finally, having accepted the removal of MYEIC costs from the test year, we will make the same adjustment to the rate year.

As for the normalization adjustment, we find that CMP has provided the correct methodology, and we will adopt it. Because the normalization accounting process began between the time of refueling outages, by necessity the 19-month period for book amortizations expires between outages. Thus, a new amortization period must begin prior to the outage's actually occurring. While we have some reservations about MY's cost projection for the 1995 scheduled outage, we will accept it. We direct CMP to propose a method at its next rate case to synchronize the 19-month amortization periods with the timing of the actual outages.

C. Other O & M

CMP first removed certain costs which had already been adjusted to rate year levels in the test year analysis. Mr. Dumais then escalated the remaining costs at a 3.7% annual rate, consisting of 2.5% for inflation and 1.2% customer growth. From this total, the Company subtracted $1.151 million for productivity improvements related to specific programs and $1.284 million to recognize identifiable savings from the management audit. CMP believes that these amounts are realistic projections of their actual achievable cost reductions.

For the Advocate Staff, Mr. Catlin followed essentially the same procedure as Mr. Dumais did for CMP. Mr. Catlin started with his adjusted test year O&M expense amount and deducted certain items which were already projected to their rate year levels. In addition to the separately quantified expenses of Mr. Dumais, Catlin projects uncollectible costs according to the 5-year average calculated in the test year analysis, and he holds wheeling costs at their test year level, based on estimates provided by CMP. After deducting the separately calculated items, Mr. Catlin applies a growth rate of 2.5% per year as a reflection of inflation. Mr. Catlin argues that any increase in customer growth should be met through productivity improvements. Rather than limit the productivity improvement target to specific programs, Mr. Catlin believes that CMP's ongoing cost containment efforts should be able to meet any growth in the number of customers.

In addition, the Advocate Staff recommends that $17 million in potential cost savings identified in the management audit should be recognized as a rate year reduction to other O&M. While the management audit is discussed in greater detail elsewhere in this report, the gist of the Advocate Staff's contention is that the audit focused on four specific areas of the Company's operation and identified a range of potential savings. The $17 million is a reasonable target for CMP. Also, if the potential savings are not recognized in rates at this time, any savings which CMP is able to achieve from the audit recommendations will benefit shareholders, rather than ratepayers who will be paying the cost of the audit.

We will discuss our recommendations regarding the potential for cost containment at CMP in more detail in the following section. We will not reflect any savings in our Other O&M adjustment, but will show the effects of our recommendation as a separate adjustment to the attrition analysis. However, we will accept the Advocate Staff's projection of growth only for inflation at the 2.5% annual rate as used by the Advocate Staff. We have modified the calculation to reflect those costs which we have already adjusted to rate year levels, and separately estimated the uncollectible expense using the Advocate Staff's proposed method.

D. Depreciation

CMP determined depreciation expense for the rate year by applying a composite rate (2.74%) which it calculated to be greater than the test year rate (2.68%). The Company claims it has accounted for all plant in service adjustments specifically considered in its test year analysis and for additions based on projected amounts to be added to each particular class of plant. The Company claims that much of the new plant has shorter service lives on average than its current plant. Thus, the composite depreciation rate must go up, which cause a nearly $3 million increase in the expense.

The Advocate Staff calculated its rate year depreciation expense based on the test year composite rate. It claims that

CMP's method of determining the rate year composite rate is flawed because it is biased by the particular amounts that are considered as test year adjustments and those that are called attrition.

We will accept the Company's adjustment to the rate year depreciation rate. We have examined the analysis provided by Mr. Dumais at Exhibit DUMAIS-5 Page 12b of 18, which shows CMP's projections of additions to plant categories. This indicates that very few of the projected additions have depreciation rates below the test year composite rate. While CMP may have some ability to affect the timing of the additions, CMP has presented enough evidence to convince us that its projection is generally reasonable.

We will use the rate year depreciation rate proposed by CMP.

E. Plant In Service

The Company and Advocate Staff witnesses have used the same methodology to estimate the rate year balance of plant in service. Both started with year-end 1992 CWIP balances, added projected expenditures for 1993, multiplied the 1993 CWIP balance by the historical ratio of plant transfers to gross property (80%), and then repeated the process for 1994. Retirements were calculated by taking retirements in the test year and escalating them at the rate of inflation (2.4% for 1993 and 2.6% for 1994). Plant additions and retirements were distributed to each month based on historical ratios. A 13-month rate year average balance was calculated from the result. The only difference between the parties lies in the level of construction spending estimated to occur over the two years after the test year. CMP assumed that 100% of its construction budget would be spent each year. The Advocate Staff used 90% of construction budgeted amounts, because historically, CMP has not spent its entire budget. CMP counters that because the level of budgeted expenditures is lower than in prior years, it has a better chance of spending the full budgeted amount.

We do not see why the Company is more likely than in the past to spend its entire construction budget. With the emphasis on cost cutting which likely will occur, we think the Advocate Staff's 90% may even be high, but we will use the Advocate Staff's projections of operating plant for the rate year.

F. Materials and Supplies

The Advocate Staff proposed a change in the method of calculating rate year materials and supplies inventory that was accepted by CMP. Basically, the inventory level is projected to grow at the rate of inflation (2.5%) for each year, and then the projection is reduced by $500,000 to recognize inventory management controls which will be in place during the test year. We accept the inventory level as agreed to by the parties.

G. Attrition Conclusion

We have incorporated each of the individual adjustments discussed above into our calculation of the rate year sales, expenses and rate base. Because our capital structure represents an average rate year concept, the allowed rate of return is the same as the test year. As shown in detail on Order Exhibits 1-13, our calculation indicates that CMP requires a revenue increase of $51,539,000 in order to compensate for test year adjustments and attrition.

VIII. MANAGEMENT AUDIT

A. Introduction and Overview

1. Background on the Management Audit

The Commission has the authority to order a management audit of a utility to determine "[t]he degree to which a public utility's operations are conducted in an effective, prudent and efficient manner judged by standards prevailing in the utility industry" and to determine "[t]he degree to which a public utility minimizes or avoids inefficiencies which otherwise would increase costs to customers." 35-A M.R.S.A. § 113(1)(B) and (C) (1988).

On August 5, 1992, the Commission ordered a management audit of certain aspects of CMP's management. This order was the result of our investigation into the many customer complaints consolidated in Docket No. 92-078. Slip op at 11-12. The Commission found that a management audit was needed to examine CMP's management structure, staffing levels, executive compensation and salaries, cost cutting and management efficiency, as well as the customer education issues raised in the complaint investigation and the customer service issues raised in Docket No. 90-076.

The Commission issued a Request for Proposal ("RFP") pursuant to State contracting requirements, and selected Schumaker and Company from the list of interested bidders.

Schumaker conducted the audit in accordance with Generally Accepted Auditing Standards ("GAAS") identified in the

November 15, 1989 Consultant Standards and Ethics for Performance of Management Analysis, issued by the National Association of Regulatory Utility Commissioners ("NARUC"). To ensure a cost-effective study and increase benefits to Maine ratepayers, the auditor appropriately focused on the processes and functional areas within CMP where high potential exists for additional management efficiencies and/or cost reductions. The auditors filed the final report with the Commission during the last week of June 1993.

The Hearing Examiners directed CMP to respond to the management audit as part of its rebuttal testimony. The auditors testified as Advocate Staff surrebuttal witnesses and the Final Report was admitted as part of their testimony. CMP was permitted to file testimony in response to any surrebuttal testimony on the management audit issues.

2. Summary of Findings and Recommendations

The audit includes eighty-nine findings and forty recommendations. According to the auditors, sixteen of these recommendations have recurring annual cost savings totalling $10.7 million to $17.5 million. In addition, the auditors identified sixteen other recommendations with estimated savings of $4.5 million to $14.5 million.[10] Thus, the audit found total savings of $15.2 million to $32.0 million.

Although Schumaker had some positive comments about certain aspects of the company's management (for example, Schumaker found that CMP had developed mechanisms to help the Company to provide excellent customer service), the auditors found that CMP did not adequately focus on achieving cost efficiencies or cost reduction targets. The audit found that the Company lacks a corporate culture that is always mindful of cost savings, especially in comparison to other utilities observed by the auditors.

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[10] The auditors were unable to estimate the cost of implementing the recommendations. Therefore, the auditors used a "slotting" technique to estimate benefits where they could not easily identify specific dollar savings. Using the slotting technique, 14 recommendations had savings of up to $0.5 million; one recommendation had savings of up to 0.5 million to $1.0 million; eight had savings of from $0.5 million to $1.0 million and one had savings from $0.5 million to over $1.0 million. Using the slotting technique, one recommendation has savings of ≤$500 thousand; 14 recommendations have savings of ≥$500 thousand ≤ $1.0 million; and one has savings of ≥ $1.0 million per year.

B. Specific Findings and Recommendations

1. Structure of the Audit

The audit is divided into five chapters. The first chapter is an Executive Summary. The specific findings and recommendations of the management audit are described in the last four chapters: 2) Management Structure and Staffing; 3) Executive Compensation and Salaries; 4) Customer Service Operations; and 5) Management Efficiency and Cost Control. We will discuss the specific findings and recommendations using the same format as the audit.

2. Management Structure and Staffing

The Management Structure and Staffing section of the Schumaker focused management audit included 17 findings and five recommendations relating to CMP's corporate structure, spans of control, staffing levels, and CMP's board of directors.

The management audit made several important comments on CMP's management culture. First, CMP must create a corporate structure that supports its strategic objectives, and management must regularly review how CMP's structure impacts on the Company's meeting those objectives. Second, CMP must develop overall policies and guidelines to ensure it develops a lean, efficient organizational structure. Finally, CMP should employ more sophisticated management analytical techniques such as aggregation analysis to analyze and implement cost savings strategies such as the more effective use of telephone service centers and vehicle repair facilities.

This section of the management audit outlined five recommendations that would result in cost savings for CMP and its ratepayers. Schumaker found $6.3 million to $11.3 million in savings associated with two of the five recommendations. The majority of the savings, $5.0 million to $10.0 million, is from consolidating CMP's District Offices. The other $1.3 million savings is from adopting additional workforce management systems (similar to the WMS the Company adopted in late 1992). These two changes primarily involve CMP personnel and would take 12 to 18 months to implement.

The other three recommendations involve organizational changes and emphasizing cost cutting goals. Although Schumaker did not quantify the exact savings associated with these three recommendations, the auditor used a "slotting" technique for estimating benefits where they could not easily identify specific dollar savings. Using the slotting technique, the Audit found that the other three recommendations would produce a range of total savings of $500,000 to $2.0 million. The three changes primarily involve Company personnel and could be implemented within six staff months.

The Company argues that "in some of the cases where there is a time frame associated with a recommendation that proposes studying a particular issue, the time frame included in the Report relates to performing the study, not implementing the recommendations that flow out of the study. So, for instance, Recommendation II R-1 suggests conducting an aggregation analysis. The time frame noted is six to 12 months. This means that the study suggested in the recommendation may take up to one year to complete."

The Advocate Staff maintains that "CMP persists in describing the aggregation analysis as leading to the closing of five district offices and describing this result as a reduction in customer service." The savings are indeed calculated based on adding up the average costs associated with 3-5 district offices, but that is not the necessary result of the aggregation analysis. As pointed out by Ms. Alexander during cross examination by the Company, this study may not result in a diminution of customer services, "[b]ecause it may be that the Company is operating inefficiently, spending more than it needs to meet needs that are not real, thereby diminution of outlying offices, more efficient coordination of current personnel, trucks and all other facilities might provide the same or even better level of service to CMP's customers at a lower cost.

The Advocate Staff recommends that the Commission reduce CMP's revenue requirement by $17.5 million to reflect the high-end of the Audit's findings of savings. The $11.3 million Schumaker found in the two Management Structure and Staffing recommendations is included in this $17.5 million. The $ .5 million to $2.0 million savings that was calculated using the "slotting" technique is not included in the $17.5 million. The Advocate Staff recommends that the Commission use the high-end $17 million because the Company will implement some of the recommendations that the Audit makes but does not specify exact savings.

The Company did not adjust its revenue requirement to reflect any of the savings associated with the quantified or unquantified ("slotting" technique) savings identified in the Management Structure and Staffing section of the Audit. CMP argues that it could take up to one year just to complete some of the studies recommended by the Audit. However, CMP witness Stevenson testified that the Company has already examined additional WMS and the aggregation analysis issues and plans to evaluate the recommendations by year end. Realistically, the Company could see potential savings in these two areas during the rate effective year.

The Auditors' findings with respect to management structure and staffing appear to have merit. While we would expect CMP to exercise due diligence, we believe that the cost savings estimated by the auditors are attainable.

After reviewing the audit and the record with respect to management structure and staffing, we believe that further improvements are necessary in CMP's overall management structure and staffing. There is little evidence that CMP's current organization has been structured to be consistent with its strategic needs. CMP's approach to organizational development appears to have been overly passive and reactive. We are especially concerned with the finding that CMP's basic organizational parameters, including its management structure and staffing, are not regularly reviewed by its management because of the audit report's finding that CMP layers of management should be improved. Further, we are concerned that CMP is significantly behind other utilities in the development and implementation of work force management systems. We are also concerned that insufficient emphasis has been placed on measuring cost savings/work productivity gains through the departmental performance indicators.

3. Executive Compensation and Salaries

The Executive Compensation and Salaries section of the management audit outlined four recommendations that could result in a one-time savings of $24,896. Two of the recommendations (III-R2: Implementing a long-term executive incentive plan and III-R3: Adjusting the customer service component of the short-term incentive plan) were assigned a high priority, estimated low implementation costs and moderate benefits. One of the recommendations (III-R4: Instituting written performance appraisals for executive employees) was given medium priority and estimated low implementation costs and benefits. The fourth recommendation (III-R1) was to continue CMP's present philosophy with regard to base salaries, and thus, requires no further action by CMP and will result in no additional benefits. The three other recommendations requiring action could be accomplished within 6 months, or, in the case of III-R2, within 6-18 months.

The auditors assign a potential benefit/cost savings of up to $500,000 for items with a "Low" benefits designation and benefits/cost savings of $500,000 to $1,000,000 of items with a "Moderate" benefits designation. The Audit Report's "Recommendation Summary" indicates that recommendation III-R3 is expected to result in a $24,896 one time savings. Consequently, the benefits/savings potential for these items totals from $1.0 million to $2.0 million. This amount is not included in the auditors' $17.5 million figure.

The audit's focus was on determining "the reasonableness, cost-effectiveness of the compensation levels (including base salaries, incentive compensation, benefits and perquisites) of executives at CMP." Reasonableness was addressed both by "external comparison" with other utilities and businesses within the region and nationally, and by "internal evaluation" taking into account the unique characteristics of CMP, such as its customer base, changing market, and local economic conditions, which contribute to its ability to attract, retain and reward employees. There are 16 executive employees at CMP, including the President and CEO, Executive Vice President, four Senior Vice Presidents, seven Vice Presidents, Corporate Secretary, Comptroller and Treasurer.

The auditors note that CMP has maintained a philosophy of promotion from within over the past several years and that the executive compensation program at CMP includes a combination of base salary, short-term incentive compensation and minimal perquisites. Benefits provided to executives are the same as those provided to salaried employees, but slightly different from union employees.

The auditors make seven findings as follows:

- CMP's philosophy of paying 90% of the national rate is reasonable; base salaries are appropriately positioned compared to regional and national utility market data. (III-F1)

- The total executive incentive compensation opportunity is too low compared to the market. (III-F2)

- The executive short-term incentive goal structure is not designed to reward individual achievement. (III-F3)

- The customer service component of the short-term incentive goal is too lenient. (III-F4)

- There are no written performance evaluations for executives at CMP. (III-F5)

- CMP has significantly controlled its benefit program costs compared to the regions and the industry. (III-F6)

- CMP has taken appropriate steps to control costs of post-retirement benefits other than pensions. (III-F7)

Reasonableness of Base Salaries

The auditors report that base salaries are set using the services of an outside consulting firm and electric utility salary surveys conducted by the Edison Electric Institute

("EEI"). Internal job and organizational descriptions are provided to the consultant to use in conjunction with these surveys to establish regional and utility-based market data with which to set executive level salaries at CMP. The auditors found that CMP's executive salaries average less than the competitive rate. They found that this level was consistent with CMP's pay philosophy which is to pay at a level of 90% of the national market rate. The auditors found this level reasonable for several reasons, including the fact that CMP experiences no significant turnover that would necessitate national recruitment efforts for executives, that the company promotes from within, that Maine is undergoing some difficult economic times, and that there are "quality of life" attributes that attract employees to Maine. The auditors state, without explanation or support, that a differential "substantially greater than 90%" would introduce the risk of losing key executives.

Short-Term Incentive Compensation Program

CMP also includes a short-term incentive opportunity in its executive compensation program.11 This incentive program is based upon meeting performance goals in five areas: safety, return on equity, price of product, conservation and customer satisfaction. The goals are recommended by the executives primarily responsible for the subject area and are reviewed by the Executive Committee and the Board of Directors' Compensation Committee, and finally, the full Board. Payouts for the short-term incentive program may be made by a combination of cash and deferred or restricted stock, at the employee's option, with a corporate matching of stock.

Return on Equity Component

The return on equity ("ROE") component of the incentive program requires that a minimum of 90% of the ROE target is exceeded before bonuses for any of the components of the short-term incentive plan are awarded. A payout is made as a percentage of the executive's base salary. The ROE goal was not met in 1990; partial payouts were made in 1991 and 1992.

Price of Product Component

The price of product component measures CMP's average cost-per-kilowatt-hour, as measured by sales to customers against the equivalent cost-per-kilowatt-hour of five other New England utilities. The target is based on exceeding a minimum of 65% of the running 3-year average of the price differential between CMP

[11] Non-executive employees may also participate in a somewhat different Employee Incentive Plan.

and the peer group. While this component is designed to counterbalance the ROE component, providing an incentive not to raise prices to achieve a payout on the ROE goal, CMP has not met its target in each of three years, 1990-1992.

Conservation Component

Conservation goals are taken from CMP's 5-year Demand Side Management Plan and depend on tracking savings for kWhs and kWs. CMP met its goals in each of three years, 1990-1992.

Safety Component

The safety goals, set in 1989, seek to reduce the number of accidents by 50% over the five year period from 1990 through 1994. These goals have been met over each of the first three years of the plan.

Customer Satisfaction Component

The customer satisfaction component is based upon a survey of residential and commercial customers, rating the overall quality of CMP and the services it provides as "good", "very good" or "excellent." CMP met its target in two out of three years, 1990 and 1992.

In its Management Audit Response - Workplan (CMP Exh. 51), in response to auditors' recommendation III-R3, CMP indicates it has increased the potential incentive award related to the Customer Service component by 25% to (2.5%) in 1993 compared to 1992. Also the Company states that it will "adjust the target to include only the "very good" and "excellent" ratings in the favorability calculation" and will set a new target. CMP projected implementation of the new standards on 10/31/93, stated that potential costs of doing so were unknown, and expected improved service quality to be the only benefit.

As noted above, the auditors make one recommendation with regard to the short-term incentive compensation program, i.e., that the Company adjust its customer satisfaction component to place the emphasis on excellent quality of service. Specifically, the auditors note that CMP has included customer service satisfaction ratings of "good," as well as "very good" and "excellent," in determining whether they have met their customer satisfaction target. The auditors state that the two highest ratings only should be used, and the customer service component of the incentive program should be weighted more heavily -- at least equal to the shareholder profitability component. While CMP reports it has made a modest increase in the payout value of this component, it does not appear that the Company has, or intends, to make customer satisfaction equal to the ROE component.

We strongly agree with the auditors that it should. The current level of customer dissatisfaction, evidenced in this and recent cases, clearly shows that CMP has given all too little emphasis on customer satisfaction issues. We note, as well, that CMP's Walker Customer Satisfaction Measurement Survey (as presented to the Commission in June, 1993), indicated that CMP's customers were most unhappy with, not service, but price. We believe that CMP's short-term incentive compensation program does not sufficiently reflect this concern, one which should be paramount to CMP in recent years of spiralling rates. In fact, we note that although CMP has a price of product component of its short-term incentive compensation program (albeit relative to other New England utilities only), it has failed to meet its goal in all of the last three years. By contrast, the ROE component of the short-term incentive compensation program is a "must meet" goal, and thereby takes on greatest importance. That is, no incentive awards for other components may be made unless the ROE component is met. We believe this indicates a clear bias toward shareholder interests which competes against the objective of keeping price (and rates) low.

The Navy argues in its brief that the ROE component payout should be disallowed because, since favorable results flow to the advantage of shareholders, that portion of the executive incentive compensation should rightfully be borne by shareholders. In addition, the Navy noted that the Commission previously recognized that using ROE as a benchmark may provide an incentive to cut costs in such a manner as to negatively impact the quality of service ratepayers receive. See Re: Central Maine Power, Docket No. 90-076, slip op at page 91. The Navy further notes that the Company removed the ROE component from its non-executive incentive program in response to the Commission's concerns, but has not restructured its executive incentive program to place less of an emphasis on ROE.

We see here, again, evidence of the pervasive pattern in CMP's management of a failure to place a sufficient emphasis on the critical elements of product price, rather than shareholder benefit. While we will not make the disallowance that the Navy proposes12, the Company's priorities in its short-term incentive

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[12] The reasons we decline to make this disallowance include uncertainty regarding the correct dollar amount and a disinclination to make cuts to accomplish "fine-tuning" which may be seen as "micromanaging." We prefer to simply put the Company on notice, as we are throughout this order, that we believe a

program further support our resolve to send a strong message to effect a reordering of its corporate priorities, as discussed further in other sections of this order.

Long-Term Incentive Compensation Opportunity

CMP does not now have a long-term incentive compensation opportunity, however, the auditors recommend that, consistent with industry trend, it implement one to focus on long-range strategic and financial goals. See III-R2, p. 86. The auditors state that this will serve to bolster CMP's executive compensation opportunities and assist in retaining executives.

While the auditors did not find that CMP has a problem retaining executives, it is reasonable to assume objectively that this type of long-term incentive tied to corporate long-range goals is generally good policy.

In CMP's Management Audit Response Workplan, the Company outlines its plan to add a specific long-term component to its incentive compensation plan, giving a November 1, 1993 implementation date. The Company projects minimal implementation costs and uncertain benefits at this time.

Perquisites

The auditors found that CMP offers few perquisites to executive employees. Vice presidents and above are allowed a company car with a maximum value of $19,850, and all executives are required to have an annual physical exam. In addition, all senior CMP officers are eligible to participate in a new Supplemental Executive Retirement Plan ("SERP"), effective January 1, 1993. The auditors find that by offering this level of perquisites, "CMP is a leader in an industry that is reducing the perquisites offered to executives."

The Navy argues that the test year should be reduced by $62,758 to remove expenses paid by CMP for its executive employees' personal use of vehicles owned by the Company, largely because it contends that the expense is an elaborate perk that ratepayers can ill-afford in these difficult economic times and that it is inconsistent with a cost-cutting mentality. The Navy argues that CMP should follow the example of Puget Power Company and eliminate this and other elaborate benefits in an effort to mitigate the cost of electric service on ratepayers.

As with the short-term incentive compensation program discussed above, we will leave the precise manner of cost-cutting

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change in corporate focus is essential, and that the Company must accomplish cost-cutting where appropriate.

to the Company but note that this is only one of many areas that CMP might consider when seriously cutting costs.

Written Performance Evaluations for Executives

The auditors found that there are no written performance appraisals for executives at CMP and recommends that they be required. The auditors note that the non-executive, salaried work force is reviewed by written appraisals against specific performance goals and expectations. The auditors state that it is unfair and unreasonable for the Company to stress the importance of written performance appraisals for all employees but to neglect to hold executive employees to the same standard. Presently, it is not possible to measure the achievement of individuals without goals and without benefit of documentation to support merit increases. Consequently, the auditors recommend that "written performance appraisals be required prior to any individual goal attainment payout" (which we take to mean merit increases).

In its Management Audit Response - Workplan, CMP states that existing rules and statutes do not provide sufficient assurances regarding the confidentiality of written evaluations of its executives. The auditors urge CMP to work directly with the Commission to ensure that necessary measures are in place for maintaining confidentiality. CMP states that it will pursue the matter with the Commission and the Maine Legislature to procure such protections. In addition, it states that management will propose to the Board that written records be kept to the extent that incentives have been achieved by individual officers. CMP projects no significant cost or benefit to be incurred from this recommendation.

The Commission has in two recent instances responded to CMP's concerns about the confidentiality of performance evaluations. The first was a Commission Procedural Order dated August 1, 1990 in CMP's last revenue requirement case, Docket No. 90-076. The second was in testimony before the Joint Standing Committee on Utilities in March, 1991. In its testimony, the Commission stated its view that the statutory provisions in Title 35-A, Section 114, provide sufficient safeguards with respect to the treatment of this information and that the statute correctly allows for review of this information if pertinent to its review of such issues as management efficiency or executive compensation.13 The testimony also cited two instances where the Commission had exercised its authority in keeping with the

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[13]CMP's proposed legislation (L.D. 722) to further restrict the Commission's access to this information was unanimously voted "Leave to Withdraw" by the Committee on April 1, 1991.

safeguards required by the statute. Thus, while the Commission is on record as supporting the release of this information subject to the protections of the present statutory scheme, we will, nonetheless, endeavor to work with CMP to address its concerns on this matter.

4. Customer Service Operations

The Customer Service Operations section of the management audit outlined 14 recommendations relating to complaint analysis, unit staffing and facilities, customer service standards, and credit and collection programs.

A number of Schumaker's general recommendations and findings are noteworthy. First, the auditors found that there is no single point of responsibility for customer satisfaction. Second, the auditors discovered ample opportunities for CMP to reduce costs while increasing customer satisfaction. Third, CMP has largely failed to use work management plans to direct its operations. Fourth, the Customer Service Centers are overstaffed.

Schumaker found $2.25 million to $3.35 million in savings associated with seven of the 14 recommendations. The overwhelming majority of the savings is from improving the customer service system ("CSS"), consolidating CMP's three phone centers into one center, reducing the number of customer representatives in the district offices, and establishing a fee for customer payments made at payment agencies (in that order). These seven changes primarily involve CMP personnel. The Audit indicates that five of the seven changes can be implemented within six staff months; one within a year; and one in about 18 staff months.

The other seven recommendations involve improving CMP's quality reporting and complaint handling procedures to improve customer service, and eventually, to prevent, some customer complaints. Although Schumaker did not quantify the savings associated with the other seven recommendations, the auditor used a "slotting" technique for estimating benefits where they could not easily identify specific dollar savings. (Audit at 20). Using the slotting technique, the Audit found that the other seven recommendations would produce a range of total savings of $1.5 million to $4.0 million. The latter seven changes primarily involve Company personnel and could be implemented within six staff months.

The $3.35 million Schumaker found in Customer Services Operations savings is included in the $17 million adjustment recommended by Advocate Staff. The $1.5 million to $4.0 million savings that was calculated using the "slotting" technique is not included in the $17 million.

The Company did not adjust its revenue requirement to reflect any of the savings associated with the quantified or unquantified ("slotting" technique) savings identified in the Customer Services Operations section of the audit. One of the seven recommendations estimated that CMP could save between $800,000 and $1.2 million annually by improving the CSS system. CMP argues that the $800,000 to $1.2 million savings from the CSS enhancements should be removed from the $ 17.5 million potential savings because "CMP already had the project well underway before the auditors arrived at CMP." The Company established a project team to evaluate its customer service system. By the end of 1992, the team reported its findings and by May 1993, CMP had developed an implementation plan. However, the Company has not adjusted its revenue requirement for the savings associated with implementing the CSS enhancements. It is one thing for CMP to say that the Company had recognized the problems associated with its CSS system before the Audit was performed; it is quite another thing to say that because the Company recognized the problem that the savings should not offset CMP's revenue requirement.

5. Management Efficiency and Cost Control

The Management Efficiency and Cost Control section of the management audit outlined 17 recommendations relating to strategic planning, budgeting, comparative analysis/benchmarking, and other management efficiency and cost control activities. Some of the major findings include that the Company could more effectively communicate its corporate vision and strategies to its employees; the Company's goals do not appropriately focus on cost efficiencies; CMP does not use "benchmarking" as effectively as it could; and opportunities for cost savings still exist in a number of areas within CMP.

Schumaker found $2.1 million to $2.8 million in savings associated with four of the 17 recommendations. The majority of the savings, $800,000 to $ 1.2 million, is from cutting O&M expenses. Another $1.0 million will be saved when CMP has implemented both phases of its Materials Management (computerized inventory) System. The other $300,000 to $600,000 is from writing off or initiating salvage procedures for unused materials. These four changes primarily involve CMP personnel and would take less than six staff months to implement.

The other 13 recommendations involve implementing benchmarking procedures for budgets, inventory analysis and follow through procedures for addressing deficiencies. Although Schumaker did not quantify the exact savings associated with these 13 recommendations, the auditor used a "slotting" technique for estimating benefits where they could not easily identify specific dollar savings. Using the slotting technique, the Audit found that the other 13 recommendations would produce a range of total savings of $3 million to $7 million. The 13 changes primarily involve Company personnel and could be implemented in less than 12 staff months.

The Company did not adjust its revenue requirement to reflect any of the savings associated with the quantified or unquantified ("slotting" technique) savings identified in the Management Efficiency and Cost Control section of the Audit.

One of the seventeen audit recommendations estimated that CMP should initiate a formal plan to achieve the $1.3 million in net cost savings that the audit concludes will result from implementing a Work Management System for a specific area. (Audit Recommendation V-R8, at page 25). CMP argues that the $1.3 million savings from the WMS should be removed from the $ 17.5 million potential savings because CMP incorporated the $1.3 million in WMS savings in the Company's original filing.

The Advocate Staff states that "[T]he amount listed for this recommendation, [WMS, Recommendation V-R8] $1.3 million was not included in the $17.5 million. . . . The audit suggests that the savings from CMP's currently planned work management system be monitored to ensure its projected savings are achieved." The $2.8 million Schumaker found in quantifiable savings from the four Management Efficiency and Cost Control recommendations is included in this $17.5 million recommended the Advocate Staff adjustment. The $3 million to $7 million savings that was calculated using the "slotting" technique is not included in the $17.5 million. The Advocate Staff recommends that the Commission use the high-end $17.5 million because the Company will implement some of the recommendations that the audit makes but does not specify exact savings.

The $17.5 million savings identified in the Audit did not include the $1.3 million savings that the Company recognized as a result of implementing its new WMS. Therefore, there is no reason for the Commission to subtract the $1.3 million from the $17.5 million quantifiable savings found by the audit. In the Company's March 1, 1993 Chapter 120 filing, CMP did adjust O&M operating expenses for its WMS. (Adjust. #21, page 1 of 26). However, the Company's latest revenue requirement calculations reduced the savings by $200,000. CMP did not explain why the

Company believes WMS savings are now less than it originally estimated. (NOI Adj. No 21, page 21, of 31, Response to oral data request No. 91.)

C. Management Auditors Finding Concerning the Lack of Cost-Cutting Culture is Correct Because the Record Reveals that CMP's Management Lacks Effective Corporate Focus

1. Conflicting Stories on CMP's Competitive Strategy

The record reveals confusion within CMP's management with respect to what competitive strategy CMP has adopted. This is an indication that there is considerable confusion within CMP as to what its competitive strategy really is and is a preliminary warning signal that CMP may be "stuck-in-the-middle." A chronology follows:

- Differentiation Strategy. The Commission-sponsored management audit report, completed in June 1993, indicates that CMP's senior officers selected a product differentiation market positioning strategy (rather than a low cost producer strategy) at the October 1992 Officers' Retreat. CMP employees, including those charged with developing the Company's marketing strategy, also believed that product differentiation is the Company's strategy.

- Focus Strategy. During cross-examination on September 17, 1993, Company witness Stevenson argued that CMP was actually trying to pursue a "focus" strategy and specifically referenced Michael Porter's book

- Competitive Advantage. Mr. Stevenson argued that under this approach, the Company would pursue either a low cost or a differentiation strategy depending on the market.

- Hybrid Strategy. Mr. Stevenson testified that "the path we'd been pursuing actually is a hybrid of . . . generic strategies." During cross-examination on September 22, CMP President Matthew Hunter testified that CMP was pursuing a three-pronged "actions" strategy. This strategy is to: 1) Get prices changed; 2) Reduce costs; and 3) Increase sales of kWh. Although Mr. Hunter did not use the term "hybrid," this strategy appears to be consistent with the hybrid strategy that Mr. Stevenson discussed during cross-examination.

2. Broad Overview and Analysis of Competitive Strategy

To properly understand CMP's current situation, it is important to clearly understand the basics of strategic planning. According to Michael Porter, whose ideas on strategic planning CMP was attempting to consider, there are only three competitive strategies that a firm can pursue. These are: 1) cost leadership; 2) differentiation; and 3) focus (which can be either cost focus or differentiation focus).

The three competitive strategies present fundamentally different visions of how a company should operate its business. Cost leadership and differentiation strategies are similar in that they seek competitive advantage in a broad range of industry segments. Focus strategies, on the other hand, aim at achieving cost advantage (cost focus) or differentiation advantage (differentiation focus) in a narrow segment of an industry.

A firm that pursues a cost leadership strategy sets out to become the low-cost producer in its industry. This firm typically provides a standard, no-frills product to a broad customer base and many industry segments and may operate in related industries. Cost leaders pursue economies of scale, proprietary technology, high capacity utilization, vertical integration, economies of scope, preferential access to raw materials and other sources of competitive advantage. Cost leaders aggressively search for and seek to exploit all potential sources of cost advantage.

A firm that pursues a differentiation strategy strives to set itself apart from other competitors in its industry by developing differences that are appreciated by buyers. It identifies certain characteristics that customers of a given product value, and strives to position itself to satisfy those wants. If successful differentiation results, the company will be rewarded for its uniqueness with a premium price. A differentiator may seek parity in terms of cost.

A company that is pursuing "cost focus" seeks to achieve a cost advantage in its target segment. A company that is pursuing "differentiation focus" seeks differentiation in its target segment. A differentiation focuser may seek parity in terms of cost.

A company that cannot decide which of the three competitive strategies to pursue is likely to become "stuck in the middle," to use a term from Porter's book. Such a company seeks to be "all things to all people" by pursuing a "hybrid" strategy. Becoming stuck in the middle is often a manifestation of a firm's unwillingness to make <u>choices</u> about how to compete.

The three generic strategies are alternative and viable approaches to dealing with the competitive forces. A company must make a choice, for example, regarding whether it will pursue cost leadership as its generic competitive strategy and, if not, whether it will at least aim for <u>parity</u> in terms of cost. If a firm is unable to choose what strategy to pursue, that firm is likely to be in an extremely poor strategic situation. A competitive firm that is "stuck in the middle" will lack the market share, capital, and commitment to play the low-cost game, the industry-wide differentiation necessary to obviate the need for a low-cost position, or the focus to create differentiation or a low-cost position in a specific niche.

3. <u>Analysis of CMP's Competitive Strategies</u>

Before discussing CMP's failure to pursue a cost leadership strategy, it will be useful for the Commission to comment upon the various strategies discussed in the record from the point-of-view of a ratepayer/stakeholder in an electric utility.

a. <u>Differentiation Strategy</u>. It seems to make little sense for an electric utility that is selling a standard product based on a set of Commission tariffs to pursue a differentiation strategy as its source of competitive advantage. While differentiation is becoming more important in the industry, as customers have begun to be more concerned about power surges and other quality-related issues, this is not likely to be a major source of competitive advantage for an electric utility for the foreseeable future. Electricity remains a fundamentally standard, no-frills product and CMP currently has little ability to provide meaningful product quality differentiation. In addition, customers have clearly indicated that they are satisfied with CMP's product but desire lower prices.

The Company points out that it has been active in offering a variety of valued services to different groups of customers, including tailored conservation measures, product quality enhancements, special facilities, and a recent emphasis on special rates, including an inquiry into chain account billing. While these examples of "differentiation" are no doubt to some extent worthwhile and we understand that it is reasonable for a utility to attempt to achieve parity in differentiation, we question whether this should be the generic strategy that the utility should pursue. CMP's examples of differentiation are minor relative to ratepayer needs for CMP to properly control its costs. For a number of reasons, which we have discussed elsewhere in this order, we believe that this customer need is not currently being met.

b. Focus Strategy. A focus strategy makes little sense for a utility that must serve all customers in its service territory at standard rates based on cost-of-service ratemaking principles. A utility lacks little, if any, ability to target its customers or to otherwise select a narrow segment of the industry in which to compete. Thus, neither the "focus" or "differentiation" strategies appear to be viable strategic options for an electric utility like CMP.

c. Three-Pronged Actions Strategy. This hybrid strategy, which apparently is the strategy that CMP is currently pursuing, indicates that CMP's management has failed to make the tough choices needed to compete in the increasingly challenging electric utility marketplace. This three-pronged strategy indicates a failure to aggressively and whole-heartedly pursue cost minimization or to recognize that this should be the Company's highest priority. Further, this hybrid strategy appears to be poorly understood within the Company. Thus, this strategy appears to have been inadequately implemented within the Company. As a result CMP appears to be "stuck in the middle."

4. CMP Should Pursue a Cost Minimization Strategy

We believe that a vertically-integrated utility, like CMP which must serve "all customers" under a regulatory system of cost-based rates, has the characteristics needed to pursue a cost leadership strategy.

In the increasingly competitive energy marketplace in which CMP must compete, cost leadership may be the only viable primary strategy. As one of the Commission's Management Auditors, Dennis Schumaker pointed out, "when you get more competition, the low-cost producer, especially initially, is going to win out for a period of time." In a marketplace where wholesale wheeling is a reality and retail wheeling is a possibility, a cost reduction strategy is the primary sustainable competitive option.

As Dennis Schumaker further pointed out:

> my experience has been a lot of utilities have talked about differentiating their product in terms of providing better customer service and this type of thing. What we're seeing recently in some of the utilities is the recognition, especially with the National Energy Policy Act and a few things that have been passed, that cost competitiveness is going to become a major issue and it may not be sufficient to try and differentiate . . . So we're finding more of an emphasis in utilities, particularly ones that have some generation they can sell and they feel with the National Energy Policy Act there's additional possibilities of making revenue to look at being more of a low-cost producer, in particular on the wholesale market, which is really where you can do it since you don't have retail wheeling there. (Emphasis added).

Moreover, pursuing cost reduction is a prudent approach when the threat of losing substantial customer load from competitive alternatives, ranging from fuel-switching to self-generation, is increasing in large part because of CMP's rapidly rising rates. It appears likely that CMP's failure to aggressively pursue a cost control strategy has been a contributing factor in its loss of load in recent years.

Multiple witnesses for both CCUC[14] (representing a coalition of CMP's commercial customers) and IECG/COLER[15] (representing a coalition of CMP's large industrial customers) testified extensively on the hardships they face in the current economic climate and how CMP's rapidly and ever-rising rates are affecting them. Their testimonies indicated that a reduction or at least a stabilization of electric rates is essential for the economic viability of Maine industry which faces competition both internationally and nationally. Maine industry is at a competitive disadvantage with other parts of the nation from electric rates which are, in some cases, 62% to 100% higher than other regions. Many stressed that rising electric rates have frustrated their efforts to implement necessary cost cuts which can make the difference of whether or not they remain in business. All noted the efforts they had made to reduce electricity usage to offset the rising electric costs. Among the options for several of these commercial and industrial customers are switching to other forms of fuel, such as gas, or self-generating, now an economically viable option due to the high and increasing level of electric rates.[16] Mr. Ash testified that the Samoset is "at a point where alternatives are not an option, but a necessity, given current rates and resulting costs" so that it was essential to "find ways to decrease our purchases from CMP." All witnesses stressed that passing along the increases to their customers is simply not possible in these times, so that absorption was their only alternative.

Additionally, these witnesses testified about the significant operational changes and sacrifices they have been forced to make in the face of recessionary pressures in order to stay in business. These changes include workforce reductions, wage freezes, finding new ways to accomplish tasks and increase

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[14] The CCUC witnesses that testified in this proceeding are: John Peters, Brunswick Coal & Lumber and affiliates; Thomas J. Mathews, Hannaford Bros. Co.; and James H. Ash, Samoset Resort.

[15] The IECG/COLER witnesses that testified in this proceeding are: Jesse Magee, III, and Samuel Brogli, CYRO Industries; Glenn Poole and David Johnson, Champion International; Stephen Rowe, Dragon Product Company, Inc.; Robert Sween, Forster Manufacturing Co.; Charles Siletti, FMC; John Spenlinhaeur, III, Spencer Press of Maine, Inc.; and Rand Stowell, United Timber Corporation.

[16] Mr. Poole of Champion International testified that self-generation would have a 2.8-year payback assuming a rate increase of 12%. Even assuming a 15% reduction in electric rates over the next five years, self-generation would have a 4.8-year payback. Mr. Poole noted that even with relatively stable usage, more than 20 utility-sponsored DSM projects and dump power purchases, Champion's expenditures for electricity have increased from $15.2 million in 1991 to $18 million in 1992.

productivity, and hard cost cutting wherever possible. Mr. Brogli testified that "[e]conomic necessity has forced us to cut costs and make changes which we might not have thought possible a few years ago." The witnesses point out that CMP should be subject to the same pressures faced by the real world businesses that are its customers in these tight economic times and that, if CMP does not do this itself, the PUC should impose market pressure upon it. They argue that traditional rate of return or business-as-usual regulation insulates CMP from the economic pressures faced by real world businesses and that CMP should not be allowed to increase rates without first achieving all potential cost savings. One lesson that these businesses have learned is that it is essential to have a customer focus to remain viable in the face of such pressures.17 Mr. Poole noted that the Bucksport mill "stayed ahead of the game" despite revenue declines by tackling cost in a number of different areas; these include, 1) reducing workers' compensation costs; 2) reducing material lost by improved controls and increased employee awareness; 3) reducing layers of management from seven to four; 4) improved "first line" quality; 5) increased focus on customer needs; 6) taking more inventory risk; and 7) "continually focusing on doing what is absolutely necessary to run this business in this particularly poor economic environment." All repeat the theme that CMP must be a low cost provider or lose customers.18 Finally, as Mr. Poole noted, "[f]or each customer that leaves the system, others must endure higher rates -- further attracting them to leave and so on," with the end result a "spiraling loss of load."

The Company must take advantage of any and all reasonable opportunities to reduce costs to ratepayers. The record in this proceeding indicates that CMP has not done so.

As Mr. Stowell of United Timber stated:

> I've watched Central Maine Power Company operate for several years and, in my opinion, they act like any other organization that does not have to exist in a competitive marketplace. There are places that Central Maine Power can cut its costs if they have the incentive to do so... The Public

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[17]Mr. Johnson states that "our customer focus drives our efforts to be a low cost producer, and it drives our efforts to work efficiently and effectively. We recognize that without our customers, we have no reason to exist."

[18] Mr. Johnson further testified that "CMP is not a low cost supplier and they must respond, or we must seek alternate sources of supply."

> Utilities Commission must seek a longer term solution. I cannot think of anything more important for this Commission to do than to resolve to reduce electric rates without deviating from the principles the Public Utilities Commission has articulated in the past, including cost-based rates, competition and conservation.

An IECG/COLER rebuttal panel also extensively discussed what other utilities around the country are doing to meet the challenges of providing electric utility service. This panel believes that CMP's efforts fall dramatically short relative to what other utilities around the country are doing.

In other sections of this Order, we have found that CMP has failed to take advantage of all available opportunities to control or cut costs. Despite the evidence that CMP has many available sources of cost savings, as documented in the Commission-sponsored management audit, the Company has failed to aggressively search for and seek to exploit all potential sources of cost advantage. Because of this, the Company has failed to meet its obligation to take all appropriate actions to lower rates to ratepayers.

In determining just and reasonable rates, the Commission may "consider whether the utility is operating as efficiently as possible and is utilizing sound management practices." 35-A M.R.S.A. § 301(4) (1988). Regulation can no longer simply increase revenues to provide a utility with a "fair rate of return" despite the utility's failure to develop a sustainable competitive strategy. The Company can, of course, choose whatever management strategy it believes appropriate. The Commission, however, must recognize the effect of management practices in setting just and reasonable rates.

D. Revenue Requirements and Management Audit Conclusions

We have now examined the Company's test year and attrition year revenue requirements, as well as the results of the management audit. Our calculations show that CMP requires a total retail revenue increase of $51,539,000, based on a test year deficiency of $45,773,000 and an attrition year deficiency of $5,766,000.

The management audit results have received much attention in this proceeding, and we have reviewed them thoroughly in this section. The question remains: What action should we take based on the evidence before us concerning the Company's operating and management efficiency?

The management audit clearly shows that CMP lacks a sharp focus on cutting costs. This is not surprising given that our analysis of CMP's corporate strategy reveals that it has failed to aggressively pursue a cost-minimization strategy. We cannot allow costs that are too high because of a flawed management strategy to be recovered by ratepayers because of § 301(4) and § 113(1) of Title 35-A.

Further, CCUC and IECG/COLER witnesses have produced substantial evidence that CMP is not doing as much to cut costs as other businesses in Maine and other utilities around the country. In addition, Dr. Silkman has argued persuasively that higher rates will result in substantial lost load. Further, many Maine ratepayers have made it clear that they have cut costs and that they expect CMP to do the same before asking for higher rate levels.

After reviewing the audit and the record with respect to management structure and staffing, we believe that further improvements are necessary in CMP's management of its operations. There appears to be little evidence that CMP's current organization has been structured to be consistent with its strategic objectives. This is perhaps understandable given CMP's failure to make the choices necessary to develop a viable competitive strategy. Management's approach to organizational development has been overly passive and reactive.

The management audit has quantified savings of $10.4 million to $17.5 million with a midpoint of $14.1 million. In addition, the auditors "slotting" techniques identified additional savings totalling $4.5 million to $14.5 million with a midpoint of $9.5 million. Therefore, the audit identified total savings of $15.2 million to $32.0 million, with a midpoint of $23.6 million. In addition, there is substantial evidence that CMP has failed to aggressively pursue cost minimization in other areas.

The Advocate Staff recommends that the Commission use the high-end $17 million because the Company will implement some of the recommendations that the Audit makes but does not specify exact savings. The Advocate Staff suggests "[i]f we combine both the unquantified costs and benefits, it is reasonable to recommend the high end of the savings estimates for use in this rate case." The Advocate Staff believes "the Company has been on notice about a number of the issues raised in the audit since at least its rate case in 1989. . . . [T]he Staff raised concerns about the implementation and costs of CMP's CSS; the building and remodeling of local service centers without adequate analysis, and the failure to integrate credit and collections with the marketing of energy management. . . . These same issues have once again been raised by the auditors [in this case] . . . ."

We find that the Advocate Staff's proposed adjustment is not sufficient for ratemaking purposes. We are aware that there are up-front costs associated with achieving the identified savings. However, there is adequate evidence of potential savings in other areas that makes it likely that CMP can find ways to achieve additional savings beyond those identified in the audit. Further, the record reveals that many of these cost savings have been previously suggested, for example, in former CMP President John Rowe's 1984 management review and in previous cases before the Commission. The Company has thus had many years to achieve many of these cost savings but has failed to do so.

The Management Audit was a focused audit, that is, it addressed only four areas of the Company's operations. There are numerous other areas in which CMP might find for cost reductions, assuming that the Company is serious when it says it wants to do so. The Schumaker audit found that CMP did not have a culture that focused on cutting costs. Now is the time for the Company to create that type of culture, as it looks at all aspects of its operations. We cannot and will not tell the Company where it should look. The management audit report certainly gives some clues, but the Company should not expect to merely follow the audit recommendations as a "cookbook." Rather, it should be used as a guide, not just for the recommendations contained in it, but as an example of how to search for potential cost savings and efficiencies.

In our analyses of the Company's test year and attrition year revenue requirements, we followed the "standard" rate of return ratemaking methodology by looking at each issue individually, making our decision about the issue, and adding up the tally at the end. Under that standard, we would now normally present the bill to the ratepayers. But, we will not do that in this instance. The management audit, the testimony of managers who are forced to deal with economic realities in their own businesses, and the indignation and pleading from the public at large has convinced us that there is substantial evidence that CMP has failed to provide service to its ratepayers as efficiently as possible. Our task is to quantify the extent to which CMP has fallen short.

In light of our obligation to consider the interest of ratepayers, as well as those of the Company, and because of our duty to consider management efficiency, we recommend that CMP's calculated revenue increase be reduced by $25.3 million, which amounts to the full $17.5 million advocated by the Advocate Staff plus $7.8 million of the additional "slotting" technique savings (the $4.5 million low end of the range, plus 1/3 of the $10 million range). While our adjustment is justified by the potential savings identified in the audit, our conclusion is supported by another perspective. CMP's discretionary expenses, as adjusted to the rate year levels in our attrition analysis, total about $180 million. Our efficiency adjustment is for a reduction of slightly less than 15% of that amount. That is not an inconsequential amount, but discretionary expenses (as we use the term in this context only) exclude recovery of fuel costs, all amortizations and depreciation, uncollectibles, and all taxes. These discretionary expenses are ones that CMP can adjust within a relatively short time frame. Given the state of the Company and its ratepayers, we expect management to move as quickly as possible. In fact, we view the Company's actions as already long overdue. Thus, a ratemaking adjustment beginning now is justified.

Although not quantified precisely, there is more than ample evidence that a rate increase of the magnitude sought by CMP would have a significant detrimental effect on the Company's sales. Thus, our recommendation is intended to help the Company retain load while it refocuses on cost control and efficiency, consistent with safe and adequate service. Our decision is designed to minimize hardship on ratepayers, while simultaneously encouraging the Company to refocus its thinking and direction.

Accordingly, we find that CMP requires a revenue increase of $26.239 million, based upon our test year analysis, our attrition adjustment, and our efficiency adjustment.

IX. RATE STABILITY PLANS

Beyond determining the base rate levels that CMP may charge for the immediate future, we believe that the time is ripe to assess, in a systematic and focused way, the manner by which CMP's rates will be evaluated in the future. To accomplish this broader objective, we asked the parties to consider alternative rate plans ("ARPs"). We have concluded that while we are comfortable with the broad outlines of an alternative rate plan for CMP, we require additional information before finally adopting a new regulatory plan that will provide both short-term and long-term benefits to the ratepayers of Maine.

Because we have concluded that the record is insufficient to make a final determination now, we will begin an "implementation" proceeding to follow this rate case. The Commission encourages

CMP and the parties to this proceeding to work to develop consensus on as many issues as possible so that unproductive adversarial battles can be avoided.

Several parties in this proceeding have testified about ARPs. CMP and CCUC each proposed price-cap mechanisms for approval by the Commission in this proceeding.

All intervenors have identified problems associated with CMP's management of its operations, such as its failure to focus on cost minimization. Not all intervenors have gone the next step to question whether traditional rate-of-return ("ROR") regulation, which is essentially "cost-plus" regulation, sends the correct signals to the Company. Some intervenors have called for the Commission to exert more stringent control and supervision of the Company's activities.

Although a number of parties have opposed Commission approval of a price-cap mechanism for CMP in this proceeding, they have testified to the problems associated with the continuation of traditional, ROR regulation. These problems include: 1) the weak incentive provided to CMP for efficient operation and investments; 2) the high administrative costs for the Commission and intervening parties from the continuous filing of requests for rate changes; 3) CMP's ability to pass through to its customers the risks associated with a weak economy and questionable management decisions and actions; 4) limited pricing flexibility on a case-by-case basis, making it difficult for CMP to prevent sales losses to competing electricity and energy suppliers; and 5) the general incompatibility of traditional, ROR ratemaking procedures with growing competition in the electric power industry.

As some parties to this proceeding recognize, the electric power industry is moving away from one where all functions have natural-monopoly characteristics and are highly regulated toward one where competition will become dominant. In this new environment, as some parties to this proceeding recognize, the *status quo* in terms of both utility and Commission ratemaking actions will be less acceptable. From CMP's perspective, tightly controlled regulation will hinder its efforts to compete with others. From the consumers' perspective, a major problem of current regulation is that it protects CMP from adverse events that are both within and beyond its control. Our efforts in the proceeding to follow must focus on finding an approach that will give CMP flexibility without license while preserving and enhancing ratepayer protections.19

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[19]While we will want to assure ourselves that any new form of regulation we adopt for CMP will be likely to produce benefits to

ratepayers at least comparable to those achievable through traditional regulation, we do not expect, nor do we encourage, the parties to devote their resources to the precise quantification of probable rate levels under various forms of regulation. We do not, for example, envision the coming proceeding as a five year attrition case. The parties should focus instead on a structure that will achieve the benefits we have identified while providing an equitable sharing of the risks.

A. Positions of Parties

The parties to this proceeding generally support the Commission's consideration of different alternative rate plans. There is a general recognition by the parties, as discussed earlier in this Order, that the electric power industry has undergone major changes in recent years and may continue to change in the future. Although there is general criticism of the current ratemaking practice that applies to CMP, the record shows that parties disagree over what should replace it and when.

The American Association for Retired Persons, the IECG/COLER, the Advocate Staff, and the OPA support the deferral of any Commission approval of an ARP until after this proceeding. One party, the CCUC, proposed a price-cap plan for approval by the Commission in this proceeding. CMP proposed a wide-ranging plan (ARP) that would couple a price cap with significant pricing flexibility.

The concerns over CMP's proposed plan caused by other parties were many and varied. The Maine State Legislative Committee of the American Association of Retired Persons ("AARP") raised several concerns and questions regarding CMP's proposed plan: 1) the broad nature of the price index; 2) the lack of a productivity offset; 3) the possible negative effect on the Company's DSM activities and long-term planning decisions; 4) the possible negative effect on the Company's quality of service; 5) the complexity of CMP's proposed allocation of rate increases between fuel and nonfuel costs; and 6) the possible promotion of uneconomical sales. The witness for AARP, Mr. Neil Talbot, also questions the role of a fuel cost adjustment mechanism in view of the Company's proposal. Finally, Mr. Talbot believes that the Commission should learn from the experiences and history of incentive-based regulation in other states and locations before approving an alternative rate plan for CMP.

The testimony of Dr. Marvin H. Kahn and Dr. Dale E. Swan, on behalf of the Commission's Advocate Staff, identified both broad and specific concerns with CMP's price-cap proposal. They recommend that the Commission not adopt the Company's plan or any alternative rate plan until enough information is available to assess both the benefits and risks. Dr. Kahn and Dr. Swan argued that the Commission should first consider whether it wants to promote competition in CMP's markets and what effect this would have on core customers, before approving an incentive-based plan. They argued, for example, that price caps may conflict with Commission goals directed specifically at the electric power industry; for example, promoting DSM activities and complying with environmental regulations. Dr. Kahn and Dr. Swan point to the problem of extrapolating from the experience of the telecommunications industry, where incentive-based plans have been widely adopted, in assuming that price caps would be appropriate for the electric power industry. The witnesses recommended a follow-up proceeding to address these questions.

Expressing more specific concerns, Dr. Kahn and Dr. Swan warned that pure price caps are rare and should be supplemented by some profit-sharing component to provide a "social safety net." They also argue that profit sharing can mitigate against a quality-of-service problem by reducing the volatility of profits/losses on the downward side. They further point to six specific problems with the Company's proposed ARP: (1) no good reason exists for setting a 2 percent price floor, given the prospect for an improved economy and the restructuring of existing contracts with PURPA-Qualifying Facilities; (2) the GNP Implicit Price Deflator is too broad an index to apply; (3) an up-front productivity offset should be incorporated into the price-cap formula in order to keep CMP's profits closer to "reasonable" levels; (4) CMP would have a disincentive to promote the goals of integrated resource planning and pollution-abatement goals; (5) the current fuel cost adjustment mechanism, as well as CMP's proposal, would provide the Company with weak incentives to minimize fuel and purchased-power costs; and (6) the Company's proposed plan excludes an annual performance review to evaluate the success of the price-cap plan.

With respect to the nexus between low-income programs and rate stability plans, Advocate Staff witnesses Dr. Kahn and Dr. Swan argue that:

> "There is far too little explanation in the Company's case of how other regulatory considerations, such as . . . low income assistance programs, will be managed in this context."

Advocate Staff witnesses Dr. Kahn and Dr. Swan are concerned about potential misalignments between "regulatory objectives" and "internal corporate profit motivations." We believe that the ELP Reserve Account, discussed elsewhere in this order, properly mitigates this concern.

The Company and CCUC presented the only proposed ARPs in this proceeding.20 In various ways, these plans are similar, as

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[20]The IECG and COLER opposed the adoption of a price cap, but urged that the Commission direct CMP to lower its rates from current levels by 15% over the next five years. The IECG/COLER proposal, in our view, is simply a pure form of price cap with a

testified to by the CCUC witness, Dr. Gordon Weil: they both involve indexing, treating fuel-cost recovery within the price cap, include a periodic review of the plan's performance, and allow for the possibility of CMP lowering prices to certain customers.

Major differences in the two plans exist. First, the CCUC plan includes the CPI and a productivity offset of one-half percentage point. The Company's plan, in contrast, includes the GNP Implicit Price Deflator and no productivity offset.

Second, the CCUC plan contains no annual price-change ceiling or floor. The Company's plan, in contrast, has a price floor of 2 percent and a price ceiling of 6 percent.

Third, CCUC's plan allows for more pricing flexibility than the Company's plan. CCUC proposes that rates can be adjusted downward whenever competition or other conditions exist. It also restricts CMP from recovering revenue deficits suffered in competitive or quasi-competitive markets by increasing prices to other customers above the specified cap.

Fourth, CCUC's plan includes fuel costs in the price-cap formula to the extent they can legally be included. The Company proposes to apply a certain portion of any index-related price change to both fuel and nonfuel costs.

Fifth, the CCUC proposal would give the Commission the discretion to terminate the price-cap plan at any time.

Further, the CCUC plan would require an annual performance review to assess the price-cap plan and, in addition, would allow any party to petition the Commission for a rate investigation at any time. CCUC argues that the review should exclude consideration of the sufficiency of the Company's revenues. CMP's plan, in contrast, calls for a general performance review during 1996.

Finally, CCUC's plan rejects the Company's "off ramp" proposal that would allow the utility to file for a rate increase if its earned rate of return is more than 300 basis points below the most recent allowed rate of return; under the Company's plan, parties could petition the Commission for a rate decrease if the Company earns more than 300 basis points above the allowed rate of return. CCUC proposes instead an annual review and the right

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substantial productivity offset. We do not view the IECG/COLER position as opposed to price caps in principle, and we encourage IECG/COLER to participate in the proceeding we initiate with this Order.

for any party, including the Company, to petition for a rate adjustment at any time.

B. Analysis of Price-Cap/Stability Plans

Price caps can be effective in controlling the prices of a firm with considerable monopoly power, such as CMP, even when profits are less tightly regulated. As an additional benefit, price caps coupled with pricing flexibility allow a regulated firm to compete on a more equal basis with other suppliers that threaten its markets: a firm is given wide pricing discretion and the opportunity to offer new services in the absence of case-by-case regulatory approval.

An important benefit of price caps lies with protecting the so-called "core customers" from competition encountered in other markets. For example, if separate price caps are placed on each class of customer, whatever revenues the utility earns in the more competitive industrial markets would not directly affect the price it can charge (say) residential customers. Actual prices to residential and other core customers would lie closer to the allowed price ceiling than would be the case for industrial and other more price-sensitive customers. In contrast, under ROR regulation a firm is generally given the opportunity to receive revenues corresponding to its revenue requirement. This implies that whenever the firm receives fewer revenues from one group of customers, it would have the right to petition for increased revenues from others by proposing to raise their prices.

We believe that a key benefit to price caps is the strong incentive to be cost effective. Customers share in the benefits of the more efficient firm and the firm can compete on an equal basis with other suppliers in price-sensitive markets. Price-cap plans appear to have the potential to work well in a mixed competition/regulation environment.

Based on the evidence presented in this proceeding, the Commission finds that multi-year price-cap plans is likely to provide a number of potential benefits: (1) electricity prices continue to be regulated in a comprehensible and predictable way; (2) rate predictability and stability are more likely; (3) regulatory "administration" costs can be reduced, thereby allowing for the conduct of other important regulatory activities and for CMP to expend more time and resources in managing its operations; (4) Risks can be shifted to shareholders and away from ratepayers (in a way that is manageable from the utility's financial perspective); and (5) because exceptional cost management can lead to enhanced profitability for shareholders, stronger incentives for cost minimization are created.

Price cap regulation is not, of course, a panacea. The price cap structure may lead to a lower quality or reliability of service; excessively high or low profits; discriminatory prices; and the risk that consumers will see little benefit from actual productivity improvements.

A survey of the record for this proceeding reveals several points of general agreement. First, several parties advocate a Commission review of ARPs subsequent to this rate case. Other parties, such as the Company and CCUC, recommend that the Commission approve an ARP in this proceeding. In either case, the Commission interprets the general position of the parties as one that supports, for various reasons, the Commission's serious consideration of ARPs as a replacement for traditional, ROR regulation.

We find that the potential benefits outweigh the potential costs and will work to implement a rate stability plan in the near future. The primary factor driving us to this conclusion is the same theme we have expressed throughout this Order, namely that CMP has not operated as efficiently as possible and we want to implement a system whereby CMP will benefit if it is efficient and will suffer if it is not. The CCUC witnesses complained that CMP does not act like a competitive business and is not aggressively cutting costs. The IECG/COLER witnesses made similar observations and asked for a price freeze and 15% revenue reduction over the next five years to force it to do so. We think that over the long-term, it is necessary to provide a structure wherein CMP has strong inherent incentives to take actions of the kind suggested by the CCUC and IECG/COLER witnesses.

We are aware, of course, that a majority of the parties to this proceeding have urged the Commission not to adopt an ARP at the present time. We agree that important details remain to be worked out, such as the problems discussed by Mr. Talbot and Staff witnesses Kahn and Swan. Even witnesses such as Dr. Silkman and Dr. Shepard, while generally supportive of alternative rate plans, were not recommending an ARP for CMP at this time. We interpret Dr. Silkman's testimony as to the proper timing of an ARP for CMP as a statement that it was more important at this time to deny CMP's rate increase request because of the more important "efficiency" message that such denial would send to CMP compared to an ARP.

We believe most of the opposition concerning rate stability plans arose from either questions of timing or concern whether all the details, such as implications for DSM, have been sufficiently explored. We agree that there are important details to be worked out before we can adopt an ARP.

C. Evaluation of Proposals

After reviewing CMP's and CCUC's proposed price-cap plans, the Commission finds that each one contains certain strengths that could be incorporated into an acceptable ARP. We find five positive elements of the Company's plan: (1) the use of an economy-wide index; (2) a general performance review to evaluate the past operation of the plan, as well as to reset new base prices; (3) a rate review mechanism, including an up-front rule for triggering a rate review (although, as discussed later in this Order, the Commission prefers a profit-sharing mechanism to be applied when the Company's earned rate of return on equity lies outside a specified range); and (4) separate customer-class price caps to protect core customers from revenue deficits encountered by the Company in more competitive markets; and (5) price change floors and ceilings.

There are also significant shortcomings to the Company's plan:

1. No up-front productivity offset;

2. A hard-to-understand fuel and nonfuel cost recovery mechanism.

3. Lack of specificity regarding which mandated-costs are to be treated outside the price-cap formula.

4. Lack of an annual review, which should include such matters as verification of price-cap/profit-sharing adjustments, monitoring of the Company's quality-of-service performance, and determination of mandated-costs passthroughs, if any.

The CCUC's proposed price-cap plan, in the Commission's opinion, has the strengths of: (1) an up-front productivity offset; (2) a narrow list of mandated costs, (3) an annual review, and (4) core customers protection from revenue deficits suffered by the Company in noncore markets. Its major weaknesses include the exclusion of an up-front rate-triggering rule and an annual-review process that would encompass a too-broad an array of issues.

There seems to be general support for an up-front productivity offset, as indicated in the testimony of Gordon Weil, Marvin Kahn and Dale Swan and Richard Silkman. Such an offset, among other things, would help to assure that efficiency gains made by CMP would benefit consumers as well as the

Company's shareholders. In most price-cap applications alluded to earlier in this Order, a productivity offset is included largely for this reason. Any approval of an ARP should be conditioned on the expectation that CMP consumers at large would benefit.

The record points to support for constraining the range of profits that the Company could earn under any ARP. Two general approaches were discussed: a profit-sharing plan and a discrete mechanism where the Company would retain all profits up to certain limits with any additional profits triggering a formal rate review.

Finally, Advocate Staff, AARP and NRCM/CLF expressed concern that a price-cap plan would diminish the CMP's incentive to promote energy conservation. While a price-cap plan would provide CMP with increased incentives to make short-term sales as long as prices exceed marginal costs, it is important to recognize that the same incentive would be present under traditional ROR regulation. It is not clear, however, whether the Company would, over time, invest less in energy conservation under an ARP given the Commission's continued strong support for DSM activities and integrated resource planning.

D. The Commission's Rate Stability Plan

The record in this proceeding supports prompt consideration of an alternative ratemaking plan for CMP. Since the record identifies "implementation" and other issues that should be further explored, the Commission directs CMP, Advocate Staff and any other party who wants to participate, to develop a specific price-cap plan for CMP. To provide guidance to the parties during the negotiation process, we describe below a Rate Stability Plan that conforms with the policy goals that we see served by an ARP. The Plan draws from the record of this proceeding those positions and arguments of parties that will best fit our goals.

The Rate Stability Plan we envision would contain three components: a price-cap component, a profit-sharing component, and a pricing flexibility component. The Rate Stability Plan would have a duration of five years, with a brief annual proceeding to implement any applicable rate changes, and a detailed review at the end of the fourth year, to investigate the performance of the Rate Stability Plan and to identify possible changes to the Plan.

Under the proposed Rate Stability Plan, CMP would gain pricing flexibility: the rates that the Company could charge would become *maximum* prices or "caps." The Company could charge rates below the cap without formal Commission consent or through a minimal compliance filing. The Commission believes that a marginal cost price floor would be warranted to minimize the possibility of CMP's driving out actual or prospective competitors by pricing below cost. Although price differentiation would likely result from the Plan, the Plan would constrain the Company from shifting revenue deficits caused by competitive conditions or for any reason to other (for example, core) customers. Revenue deficits, instead, would be borne by shareholders. Placing the Company in a position where it would have to cut costs to make up for these deficits, rather than recovering them from other customers, should be an essential component of any alternative rate plan.

The proposal to prohibit CMP from recovering revenue deficits from other customers is compatible with the workings of competitive markets. In a competitive environment, a firm's profits suffer anytime it loses customers or is forced to lower prices to retain existing customers. Potential revenue deficits will motivate CMP's management to minimize profit reductions in noncore markets by improving its overall efficiency or else facing the prospect of strong opposition from its shareholders. Cost-cutting would also ultimately result in both core and noncore customers' paying lower prices than what they would otherwise pay. We believe that the added risk confronting the Company would be compensated for by its greater opportunities under the Plan to price more on the basis of competitive conditions and to earn higher profits.

Pricing flexibility, along with prohibition against the Company's recovering revenue deficits from customers, in the Commission's opinion, would provide a number of benefits: (1) the Company's ability to compete to retain customers with options would be improved (thereby tending to provide more revenues to the utility over which it can spread its fixed costs); (2) the Company would have a strong incentive to avoid giving special contracts to "free riders" (that is, those customers who would not have reduced their load in the absence of a discounted rate); and (3) the high administrative costs associated with the case-by-case Commission approval of special-rate contracts and other forms of discounted rates would, for the most part, be eliminated.

The proposed Rate Stability Plan would benefit both CMP's consumers and shareholders. It should improve the Company's incentive to control its future costs, and to adjust its prices quickly in response to competitive and other market conditions. The overriding rationale for a Rate Stability Plan is to lower costs and prices for customers, especially core customers, and provide an opportunity for the Company to earn more profit. Although an alternative rate plan should explicitly allow profits to vary with the actual performance of the Company, a "safety net" should be incorporated into the Plan. The profit-sharing component of the proposed Rate Stability Plan would provide that "safety net," while at the same time retaining the necessary incentives for motivating CMP to control its overall cost of service. The Commission finds it extremely important that any alternative rate plan elicit better performance on the part of CMP management. In the Commission's opinion, a Rate Stability Plan would achieve this objective.

E. Implementation Issues For Follow-Up Proceeding

We hereby initiate a follow-up proceeding with the objective of establishing, through cooperative interaction by the parties if possible, the precise parameters of the Rate Stability Plan for the Company. We find that several issues raised in this proceeding, relating to the Rate Stability Plan have not been fully addressed.

The Commission encourages the parties to this proceeding to collaborate over the next few months in order to resolve the implementation issues associated with the Commission's proposed Rate Stability Plan. Should negotiations among the parties fail to reach a consensus, the Commission would then initiate a formal proceeding to be terminated by mid-1994.

Relitigating this proceeding will create costly delays in reshaping CMP's incentives. The parties' efforts in the follow-up proceeding, therefore, should focus on implementation issues that are defined as narrowly as possible. Set forth below is the Commission's list of questions that should be addressed. Additional litigation of some of these issues may not be necessary, but they are included to facilitate the parties' ability to arrive at a consensus. The high-priority issues are items 3, 5 and 7. We discourage parties from deviating from the basic framework and parameters set forth herein. In the near future, a Procedural Order will be issued with regard to various procedural issues relating to ARP implementation.

1. Selection of a price index

What economy-wide index, such as the CPI, PPI or GNP Implicit Price Deflator, should be utilized in a price-cap formula?

2. Creation of a profit-sharing component

What should be the precise design of a profit-sharing mechanism? For example, what should be the design of the bands and the sharing ratios? How should the earned return on equity be measured? How should "irregular" profits be treated?

The profit-sharing component adds a second rate adjustment to the Rate Stability Plan. The Commission proposes that such an adjustment be made at the annual review. Technically, the adjustment could occur by lowering or increasing the latest rates to reflect the required revenue changes compatible with the profit-sharing component. Within the "neutral-zone" region, no such rate adjustment would occur as the Company would keep all the profits it earns when the earned rate of return does not exceed the allowed rate of return by more than (for example) 200 basis points. Setting a "neutral-zone" region prevents an annual rate adjustment (excluding the price-cap adjustment) unless the Company experiences more than "normal" deviations in its earned rate of return. The profit-sharing mechanism is symmetrical in that the Company could not increase its rates as long as the earned rate of return does not fall more than 200 basis points below the allowed rate of return.

A sharing parameter of 0.5 or greater outside the "neutral-zone" region permits rate adjustments that would tend to mitigate against the Company earning, what some might characterize as, "extreme" profits on both the high and low ends. As an alternative design of the profit-sharing component, a formal rate review may be triggered whenever the earned rate of return on equity falls outside a specified range (similar to what CMP proposed in this proceeding). The problem with such a design is that it could lead to perverse incentives. The Commission believes that the 0.5 value would give the Company sufficient incentive for improving its operating efficiency, while at the same time constraining the Company's rate of return to a reasonable range of values.

3. Productivity offset

There is substantial debate regarding how to set the productivity offset. How should a productivity offset be determined? What should it reflect? Is productivity already captured in the economy-wide index? Should the productivity offset be based upon detailed studies of long-term productivity growth by electric utilities? Should it include a "stretch factor," which would pass through up-front more of the benefits of productivity improvements to consumers? Should the index "match" the productivity factor? While generally the price-cap formula should simply be the choice of an economy-wide index, offset by an assumed electric industry productivity factor, the parties may wish to explore the extent to which future sales growth can be expected to match cost increases.

Since the determination of the productivity offset is the most significant issue in determining the specific characteristics of the Rate Stability Plan, the Commission expects the parties to provide substantial evidence on it.

No matter how the productivity offset is defined or perceived, it would affect the share of actual efficiency gains going to CMP shareholders and to consumers. Although determining a productivity offset that would make consumers better off would always involve some margin of error, it can provide the credibility to the Rate Stability Plan that may be needed for public-wide acceptance. A "stretch factor" to the productivity offset should be given serious consideration during negotiations in order to minimize risks to consumers, as well as to place more pressure on CMP to improve its cost efficiency. The productivity offset should be no less than one percent, which is what CMP proposes in this proceeding once the fuel deferrals have been recovered.

4. Scope of annual review

The annual review should be restricted to determining the mandated costs that can be passed through to consumers, verifying the profit-sharing and price-cap rate adjustments, and evaluating the Company's quality-of-service performance during the previous year. Any performance-evaluation, base-rate resetting activity or other activities affecting the operation of the Rate Stability Plan should be done only at the Commission's multi-year (4-year) performance review.

How the Commission responds to the Company earning profits far removed from its targeted levels (for example, this proceeding's Commission-approved rate of return on equity) would have an important effect on the incentive aspects of the Rate Stability Plan. The profit-sharing component of the Plan establishes up-front rules, thereby mitigating against the Commission arbitrarily changing the rules, which in turn could lead to (perverse) strategic behavior by the Company that would be incongruous with promoting long-term cost efficiency. Prior to approval of the Plan, the Commission will need to determine the treatment of "extreme" rates of return on equity (a rate of return, for example, that differs from the latest Commission-approved rates of return by a prespecified amount or large changes in the costs of capital). The discussion of "extreme" rates of return on equity should be done at the multi-year performance review, rather than at the annual review. The Commission recommends that these reviews should take place every four years.

What should be the procedures for conducting the annual review? Should it include routine price-cap and profit-sharing rate adjustments that could be passed through, say, following a thirty-day review period? Should the annual review also include whether certain costs fall within the meaning of "mandated costs" and an assessment of the Company's quality of service? How could these reviews be expedited in an annual review? How, technically, will rate adjustments be carried out?

5. Customer satisfaction and reliability incentives

Concerns over the effect of an alternative rate plan, such as the Rate Stability Plan, on the Company's continued incentive to provide high quality of service will need to be addressed. (See, for example, Talbot Surrebuttal at 14.) The development of explicit incentives to more intensively monitor certain of the Company's activities (such as those used in New York) should be given consideration.

At this time, the Commission has not determined whether its current authority, which would continue under the Rate Stability Plan, to penalize the Company for an excessive number of consumer complaints or safety and reliability negligence provides an effective regulatory stick to the Company. It is also not clear to the Commission that the Company would lower its quality of service even in the absence of Commission oversight (which, incidentally, may not be economically bad if the resultant cost savings exceed the lost consumer benefits). Resolution of the quality of service issue would be required prior to this Commission's approval of the Rate Stability Plan.

6. Definition of mandated costs

The Commission agrees with CCUC that the definition of these costs should be kept as narrow as possible. Almost any category of cost that the Company incurs (with the possible exception of taxes) can arguably be affected by management actions. The ability of the Company to pass through large cost items would diminish the effectiveness of the Rate Stability Plan to control the Company's costs. Parties should agree on a narrow list of items that would qualify as mandated costs. The Commission believes that these costs should be limited to those that affect only CMP or the electric power industry. Costs that affect other industries, such as general tax increases and broad-based new government regulations (for example, higher health-care costs), would be reflected in an economy-wide price index. Passthrough of mandated costs should be determined in the annual review process.

Amortizations of cancelled plant that end during the price-cap period should be passed through to ratepayers at the annual review. As the amortization of ELP expenditures and ERAM deferrals are of a non-recurring nature, we would expect that this amortization would be included in the list of "negative passthrough" items in the Rate Stability Plan. Unlike cancelled plant, ELP amortizations or ERAM deferrals, current routine, recurring amortizations should not be included as passthroughs since when one amortization ends another is likely to replace it. Thus, the list of negative passthrough items should be very short.

Regarding FASB No. 106 ("Accounting for Postretirement Benefits Other Than Pensions"), CMP's offer to forego recovery of 50 percent of these costs, seems reasonable. Since uncertainties will persist, the recovery of the 50 percent should perhaps take place at the first annual review of the Rate Stability Plan, rather than at the end of the current rate case. Given that these costs are currently being deferred, CMP should be somewhat indifferent to the timing of the rate increase to recover for these costs. In any event, these costs should be closely examined in the follow-up proceeding or the first annual review.

An important question is whether or not new capital expenditures for both demand- and supply-side activities should constitute a mandated cost item (with the Commission's continuing to conduct a prudence review) to be recovered from consumers outside the price-cap formula. The Commission recommends that these expenditures not be treated separately. The Company could request, however, special passthrough treatment which the Commission would approve if circumstances dictate.

A reason for not treating capital expenditures separately, is that it would help to eliminate the oft-discussed problem of ROR regulation giving firms an incentive to overcapitalize (the so-called "Averch-Johnson effect"). As an additional reason, by incorporating all capital expenditures for each category of resource (for example, new power plants, DSM activities, firm purchased power) into the price-cap formula, the Company would have an incentive to make least-cost investment decisions. The Commission believes that such treatment of new capital expenditures should reduce the need for retrospective prudence reviews of CMP's planning activities.

A number of questions must be resolved. What should be the definition and scope of mandated costs? Should they only include those costs that are unique to the electric power industry and CMP? Regarding FASB No. 106 ("Accounting for Postretirement Benefits Other Than Pensions"): What is the correct estimate of the total transition obligation? Are at least 50 percent of these costs prudent? What should be the passthrough rate increase?

7. Treatment of fuel and purchased-power costs

What should be the appropriate treatment (given current legal constraints) of these costs under a Rate Stability Plan? To what extent should these costs be recovered differently than what they are currently? Would a "no change" approach to recovering fuel and purchased-power costs seriously diminish the potential cost-efficiency benefits of a Rate Stability Plan? How can the allocation of revenue changes between fuel (which is reconcilable) and non-fuel (which is not) best be achieved? What options are available to the Commission, given Maine's current public utility statutes and the Commission's current rules and regulations? Could revenue loss through ill-conceived discount rates that are reconciled through the fuel cost adjustment hurt core customers?

In Docket No. 92-102, the Commission found that despite their concerns regarding the inclusion of QF capacity costs in the fuel cost adjustment, "the Commission finds that no change will be made to the current fuel cost adjustment ratemaking treatment for QF capacity costs at this time." 92-102 Order at 89. The Commission desired further analysis of two issues:

First, the mechanism to identify the capacity component of QF contracts which do not provide a breakdown in the rate of energy

> and capacity has not been developed. . . . Second, while we are concerned about "most-favored-capacity" treatment of QF capacity costs and we find that there is insufficient evidence regarding potential unintended impacts on incentives of removing QF capacity payments from the FCA (such as impacts on economic dispatch), we are concerned that a new set of "perverse incentives" may be created by making this change. Because we do not wish simply to trade one set of problems for another, we believe it is important to give further thought to the mechanisms and changes which should be implemented in this area.

Id. 89.

Since the Docket No. 92-345 implementation proceeding will consider the fuel adjustment clause's impact on the Rate Stability Plan, that proceeding is an appropriate time to determine whether or not to remove capacity payments relating to new QF resources (including expansions, extension or renewal of existing QF contracts) from the fuel cost adjustment. These capacity costs would instead receive recovery under the price cap plan. QF contracts that are currently in the fuel cost adjustment would remain in the fuel cost adjustment until expiration of the contract or changed circumstances dictate removal from the fuel cost adjustment.

To address this issue, we ask the parties to evaluate the following issues in the Docket No. 92-345 Rate Stability Plan Implementation Proceeding.

1. How capacity/energy costs should be split if the contract does not provide that breakout? Since the record in 92-102 does have some discussion of this issue, a logical starting point would be for the parties to explain which of the methodologies put forward is preferable.

2. Does the evidence established in Docket No. 92-102 (Phase II) with respect to the "perverse incentives" of including QF capacity payments in the fuel cost adjustment sufficiently outweigh possible unintended impacts on incentives?

    a. How would economic dispatch be affected if QF capacity payments are not recovered in the fuel cost adjustment? If QF capacity payments are not recovered in the fuel cost adjustment, would this create unintended impacts on economic dispatch?

b. Would different treatment of QF capacity costs relative to Maine Yankee capacity costs have a perverse impact on incentives?

8. Effect on demand-side management (DSM) activities

The central question is whether there is a need for the Commission to develop stronger incentives to promote CMP's energy-conservation activities to compensate for the added incentive of an ARP to promote sales. Because of the longer regulatory lag that would be expected under the Rate Stability Plan, the Commission agrees with some parties that the Company could profit more than it currently does from promoting electricity sales. From this perspective, therefore, it seems that there would be a need for additional DSM incentives. From another perspective, however, additional incentives may not be needed as Maine already has DSM incentive mechanisms, and the Commission would have the same authority that it now has over the integrated resource planning process. In other words, the resource planning obligation of the Company and the Commission's policy goals with regard to integrated resource planning would remain intact.

Finally, should this Commission consider instituting an additional DSM-incentive plan at the same time that the Rate Stability Plan would become effective, similar to a recent action by the New York Commission? The Commission could choose to give CMP additional incentives for DSM activities in the future if circumstances dictate. For example, the Commission could allow the Company a higher share of the cost-savings from DSM activities than what it currently allows.

9. Termination Option

Once approved, the Commission believes that it should be strongly committed to the Rate Stability Plan. Still, there may be "extreme circumstances" where a return to traditional ROR may be warranted. The definition of such circumstances should be made before implementing a plan.

10. Pricing Flexibility

What Commission oversight of rate charges, if any, would be required? How can pricing flexibility be reconciled with rate design proceedings? Should the utility be allowed the authority to lower rates on a case-by-case basis (based upon programs in which all customers that meet certain criteria would be allowed lower rates)? Given the utility's strong incentive under the Rate Stability Plan to avoid giving unnecessary rate discounts, is "undue" discrimination a major concern?

11. ELP Under the Rate Stability Plan

Notwithstanding any rate stability plan, the Commission expects the Company to understand completely and thoroughly that it is obligated to manage its low-income program cost-effectively, appropriately targeting cost-effective benefits to low-income residential ratepayers who most need assistance while minimizing costs to the overall body of ratepayers. We believe that expectation is consistent with the Commission's Order in Docket No. 93-157 (Re: Modifications to Central Maine Power Company's Electric Lifeline Program for the 1993-93 Program Year) The Commission intends to evaluate carefully the low-income program's performance over the term of any Rate Stability Plan.

X. RATE DESIGN

A. Background

Central Maine Power prefiled the direct testimony of Peter A. Maheu showing the results of his allocation of the proposed revenue increase to rate classes, the basis for the design of the proposed rates, and the impact on typical bills. On June 25, 1993, CMP presented Fred Anderson, who submitted to cross-examination on the Maheu prefiled.

On July 14, 1993, CMP filed revised tariff pages to Rates AL and SL, and revised pages to its Terms & Conditions reflecting increases to line extension and special facilities charges. The revenue impacts of the July 14th filing are taken into account in Tuoriniemi/Dumais Adjustment NOI No. 9.

On May 19, 1993, the Navy prefiled the testimony of Thomas J. Knobloch on cost of service, revenue allocation, and rate design. This testimony was entered into the record without examination.

B. Parties' Positions

1. Central Maine Power Company

CMP proposes to allocate the increase to rate classes without impacting existing revenue allocations, either fuel or base. Using the compliance marginal cost study from June 28, 1991 in Docket No. 89-068, Maheu adjusted the marginal costs by a ratio of 1992 adjusted test year kilowatt-hour sales to 1988 adjusted test year sales. The revenue increase was, then, allocated to each rate class on an EPMC (equal percentage marginal cost) basis. Within each rate class, the required revenue increase was allocated to each rate element in proportion to the current revenues derived from that element. This methodology is consistent with that used in the two rate increases since Docket No. 89-068. On cross, Anderson agreed that the methodology preserves the 4% Rate A-TOU cap from Docket No. 92-078.

2. Navy

The Navy's witness, Knobloch, testified that CMP's update of the 1988 marginal cost study was partial in that the adjustment was only related to sales and did not take customers, coincident peaks, and non-coincident peaks into account. He points out that CMP has filed a fully updated marginal cost study in Docket No. 92-315 showing that marginal costs have changed significantly since 1988. Knobloch shows that CMP's resulting allocation is not entirely equal percentage of marginal cost if all revenues are allocated by the updated study. Since he believes that it is inappropriate to use an improperly adjusted, out-of-date, marginal cost study, when a new study will be available pending a resolution in Docket No. 92-315, he would allocate the increase by a uniform percentage to each rate class on an interim basis.

3. The Advocate Staff

The Advocate Staff points out that of the three approaches to allocation, Knobloch's EPMC method moves more in the direction of true marginal cost allocation but would produce less rate stability. Knobloch's "across-the-board" method moves away from marginal cost allocation but is most stable. CMP's EPMC increase allocation provides a balance between rate stability and movement toward marginal costs. The Advocate Staff prefers CMP's method but would not object if the Commission chose the Navy's across-the-board approach.

C. Conclusion

Since our decision in Docket No. 89-068, we have applied each rate increase using an EPMC methodology. We find that such methodology remains proper and consistent with our most recent rate design decision. Accordingly, we will allocate this using CMP's EPMC method.

XI. CONCLUSION AND ORDER

For the reasons stated in this Order, we find that Central Maine Power Company's revenue shall be increased by $26,239,000 and the new rates shall be put into effect which are designed to generate the new revenue requirement. No additional ordering paragraphs are necessary to implement this revenue requirement beyond those already provided in Part I. We do Order

1. that a follow-up proceeding be held to implement an alternative rate plan as described in this Part II Order. We leave to the discretion of the Administrative Director and the Hearing Examiner[s] whether to initiate a new docket and to deal with notice and intervention procedures.

Dated at Augusta, Maine, this 14th day of December, 1993.

BY ORDER OF THE COMMISSION

Charles A. Jacobs
Administrative Director

COMMISSIONERS VOTING FOR: Paine
Nugent

COMMISSIONER DISSENTING IN PART:
Welch

DISSENTING OPINION OF CHAIRMAN WELCH

I dissent in two respects from the decision of the Commission.

First, I do not agree that CMP should be granted an additional $5.766 million in rates based on projections of growth in costs and growth in revenues from the test year to the rate year.

The attrition allowance granted here rests upon two projections: an estimate of revenue growth, and an estimate of the growth of CMP's costs. The record in this case does not persuade me that CMP has shown, with sufficient reliability, the accuracy of either projection, and I have concluded that CMP has failed to meet its burden of proof.21

With respect to revenue projections, the degree of variation from one forecast to the next, and the variation between forecast and "actual," is strong evidence that the forecasts presented here provide little guide to the level of revenues that CMP is likely to achieve in the rate year. The fact that CMP's forecasts in the past have a small average error says nothing about their predictive power for any particular future period. It is not obvious to me why CMP's ratepayer should pay increased rates based on revenue estimates that have so little predictive power.

Even more troublesome to me is the "trending" of CMP's costs from the test year to the rate year. For non-outage related expenses for Maine Yankee, and other O&M expenses for CMP itself (for example), the majority decision accepts that costs will grow at a projected 2.5% rate of inflation. I do not believe the Commission should assume, however, that these cost increases are beyond the power of CMP to control,22 regardless of whether these costs have more or less increased with inflation in the past. Today's economic climate does not allow CMP the luxury of "business-as-usual" cost trending. The Company and its

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[21]As Advocate Staff correctly observes, at pp. 82-85 of its brief, CMP bears the burden of proving it is entitled to an attrition allowance.

[22]The Hearing Examiners blend their recommendation with respect to attrition with their recommendation concerning the management audit. See H.E. Report, p. 179. I believe, however, that the two should be kept separate. The management audit identified the areas in which CMP is currently operating less efficiently than it should. Attrition seeks to quantify the likely changes from a baseline (presumed efficient) relationship between revenues and costs.

ratepayers would both profit from a management commitment to limit any rate year cost growth (not already reflected in test year adjustments) to amounts consistent with revenue growth.

My overarching reason for opposing the attrition allowance in this case is that, where both competition and customer impact require that the Commission reject any level of increase in rates that is not fully supported and justified, the Commission should be especially reluctant to resolve uncertainties in favor of increasing rates. The uncertainties here with respect to the degree of growth in revenues and of costs are, to me, too great to add nearly $6 million to the increase we should grant to CMP.[23]

With respect to the adjustment for inefficiency, I concur with my fellow Commissioners in all but the precise quantification of the adjustment. I would reduce the overall revenue requirement by $23.6 million, representing the mid-point of the available savings identified by the management audit. In light of the majority's decision to grant an allowance for attrition, however, I have no difficulty concluding that, in overall context of the Order, the reduction of $25.3 million found appropriate by the majority is fully supported by the evidence.

This document has been designated for publication.

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[23] I do not quarrel with adjusting test year data for "known and certain" changes -- such as the expiration of Commission-ordered amortizations, or changes in tax rates -- where the effect of those changes will be experienced in the rate year. Virtually all of the attrition allowance permitted here, however, involves the estimated growth in the difference between two sets of projections, neither of which I find sufficiently reliable for ratemaking purposes.

NOTICE OF RIGHTS TO REVIEW OR APPEAL

5 M.R.S.A. § 9061 requires the Public Utilities Commission to give each party to an adjudicatory proceeding written notice of the party's rights to review or appeal of its decision made at the conclusion of the adjudicatory proceeding. The methods of adjudicatory proceedings are as follows:

1. Reconsideration of the Commission's Order may be requested under Section 6(N) of the Commission's Rules of Practice and Procedure (65-407 C.M.R.11) within 20 days of the date of the Order by filing a petition with the Commission stating the grounds upon which consideration is sought.

2. Appeal of a final decision of the Commission may be taken to the Law Court by filing, within 30 days of the date of the Order, a Notice of Appeal with the Administrative Director of the Commission, pursuant to 35-A M.R.S.A. § 1320 (1)-(4) and the Maine Rules of Civil Procedure, Rule 73 et seq.

3. Additional court review of constitutional issues or issues involving the justness or reasonableness of rates may be had by the filing of an appeal with the Law Court, pursuant to 35-A M.R.S.A. § 1320 (5).

Note: The attachment of this Notice to a document does not indicate the Commission's view that the particular document may be subject to review or appeal. Similarly, the failure of the Commission to attach a copy of this Notice to a document does not indicate the Commission's view that the document is not subject to review or appeal.